Before a panel appointed under the Fast-track Approvals Act 2024 **FTAA-2504-1046**

UNDER	the Fast-track Approvals Act 2024 (**Act**)
IN THE MATTER	an application for approvals for the Waihi North Project (**WNP**) – a listed project described in Schedule 2 of the Act
BY	**OCEANA GOLD (NEW ZEALAND) LIMITED Applicant**

STATEMENT OF EVIDENCE BY SHAMUBEEL EAQUB ON BEHALF OF OCEANA GOLD (NEW ZEALAND) LIMITED

Economics

Dated 1 September 2025

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Introduction

1. My full name is Shamubeel Eaqub. My qualifications and experience, and my role in the Waihi North Project (**WNP**), are set out in my statement of evidence dated 10 February 2025 included in Part G of the substantive application document for the WNP.

2. I have been asked by OceanaGold (New Zealand) Limited (**OceanaGold**) to provide a response to specific matters within my area of expertise contained in written comments on the WNP application from persons invited by the Panel to comment under section 53 of the Act. The topics I cover are:

   a. The Parliamentary Commissioner for the Environment's comments about the cost - benefits analysis.

   b. Suggestions in the comments that the WNP's benefits are overstated.

   c. Ngāti Porou Ki Hauraki (**NPKH**)'s comment that the benefits are overstated and that most of the benefits will flow overseas.

   d. Comments about the "boom and bust" nature of mining.

   e. Economic issues raised by Coromandel Watchdog, including comments about greenhouse gas emissions.

   f. Royal Forest and Bird Protection Society of New Zealand Incorporated (**Forest & Bird**)'s suggestion that Canadian ownership reduces the economic benefits of the project.

3. I have prepared this statement within the limited time available to me. Consequently, it is necessarily at a high level. I am able to provide a more

fulsome response to the issues covered in this statement if the Panel requires further assistance from me.

Code of conduct

4. I confirm that I have read the code of conduct for expert witnesses contained in section 9 of the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise, and I have not omitted material facts known to me that might alter or detract from my evidence.

Parliamentary Commissioner for the Environment - cost benefit analysis

5. The PCE questions whether the environmental costs of WNP have been included in the valuation of the WNP benefits and questions the use of the multiplier.

6. In the context of the Fast-track Approvals Act 2024 (**FTAA**), and Schedule 5 in particular, I am aware that the WNP has been assessed for its environmental, social and cultural impacts against a mitigation hierarchy: avoid, remedy, mitigate and then addresses residual effects through a combination of targeted offsetting or compensatory measures. In respect of ecosystem services, it has been assessed that there will be no net biodiversity loss or net loss of ecosystem services with an impact that is more than minor and, in some cases, a net gain has been assessed.[1]

7. In addition, the proposed Biodiversity Project will ensure an additional net gain for biodiversity funding within the DOC estate of $8.4 million. Compensation has also been assessed by DOC and will be payable under the conditions of the Access Arrangements for activities on DOC land. It is

[1] B.46 - OGNZL Wharekirauponga Mine: Overall Summary of Ecology Matters, February 2025, Table 3

also customary for technical assessments prepared in consenting processes of this kind to include consideration of externalities (additional infrastructure costs for example that a project could generate) and to address these costs through conditions. Any cost-benefit-analysis will need to address the marginal costs and benefits of the project only, or risk substituting economic evaluations for the detailed technical assessments undertaken by the various subject-matter experts to meet the decision-making requirements of the FTAA.

8. In this regard, multiplier analysis, which measures increases in economic activity, has limitations that are well understood. It is not a holistic assessment of the benefits and the costs associated with an activity. However, I am frequently asked to identify the exports, jobs and expenditure that a project will add to the economy, as it remains one of the key ways that decision-makers seek to understand a project's economic effects within the context of a process that assesses different classes of impact separately, each in their own right. It remains a valuable tool for that purpose, and it is offered in that light.

9. Nor has there been an attempt here to overstate the benefits of the project. I have deliberately sought to be conservative in my assessment of the project's economic benefits, using a conservative gold price.

10. My economic assessment is confined to the marginal additional expenditure that the project is modelled to bring within the local, regional and national economies, using capital and operational expenditure estimates provided by OceanaGold. The spending that takes place in New Zealand (that is excluding payments to foreign suppliers and any repatriation of profits) has been used to very clearly illustrate the in-country expenditure benefits associated with the project. This is the additional economic activity that takes place in New Zealand as a result of the project.

11. In terms of the employment that is associated with that spending, I have split this out (using estimates for labour from different sources that were provided to me by OceanaGold) to show the direct employment in the mine,

contractors, overseas contractors, employment in suppliers and the wider induced employment effects. I understand the limitations of multiplier analysis, but have provided these for completeness for the reasons already explained. The analysis presented also clearly shows the component parts of my estimates, so that Panel is furnished with the numbers to inform the level of influence they wish to rely on.

12. Secondly, the PCE refers to the issue of substitution with multiplier modelling. He recommends that the modelling providing the basis for my assessment of exports, employment and expenditure effects is not used to assess benefits at the regional and national level given the opportunities at that level to deploy the relevant resources elsewhere.

13. In this case, it is not correct to assume that the project will divert resources from other economic activity for what may be "relatively little net economic gain". There is no alternative economic use of the gold if it is not mined, and it has no value independent of its potential for economic extraction (the globally accepted test for establishing a mineral resource). The counterfactual, should this project not go ahead, is that an estimated $1 billion of Foreign Direct Investment (**FDI**) will not take place and hence this injection of foreign capital via expenditure into the New Zealand economy would simply not occur. $1 billion is the marginal additional money introduced into New Zealand through FDI, which will enable the operations of the mine, and contribute both directly in the capital expenditure and via operations jobs, payments to government and in-country expenditure.

14. With all of the forgoing in mind, I consider the primary assessment of benefits of this project at the local, regional and national level should remain as set out in my original assessment. Nevertheless, for perspective I have provided an assessment of the costs to ecosystem services of activities within the Coromandel Forest Park (using several published attempts to establish a framework for valuing ecosystem services). I have applied the assessment across the area within which vibration from Wharekirauponga Underground Mine could potentially impact wildlife. I am informed that this

area also hosts the rhyolite outcrops within the Edmonds catchment, where groundwater modelling indicates potential impacts from mine dewatering falling within the upper range of the assessments (see figure below). In both cases the technical assessments indicate that the likelihood of impacts, while greatest in this area, remains low.

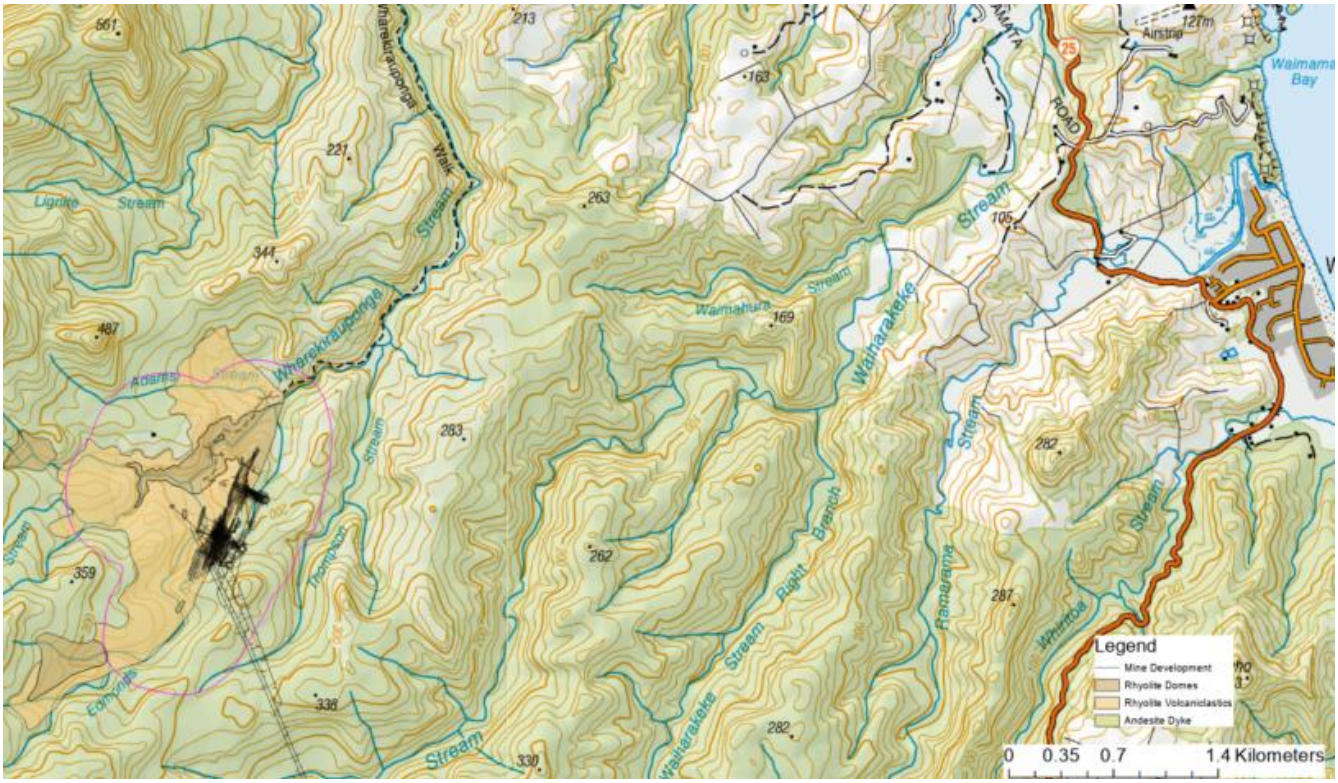


Figure 1: Vibration footprint, overlaid to show underground mine and Rhyolite Domes

15. I appreciate that the environmental impacts from the WNP are broader than those within the Coromandel Forest Park. I have chosen to use the potential effects within the Forest Park as an example for this exercise.

16. That cost benefit assessment is set out in Appendix A to this statement and is summarised in the following paragraphs.

17. I have conservatively assumed that:

    a. The areas affected by specific infrastructure and disturbance to the forest encompassing a total area of 0.84 ha (including already cleared sites and 0.66 ha that is new) remain unrehabilitated post clearance

for the duration of mining (in reality the exploration and geotechnical drilling sites will be temporary); and

b. The total area affected by vibrations is consistently 314 ha, from years 8 to year 15 (in reality, mining underground will be occurring on any given day within a fraction of this area, and as areas are progressively mined-out within the total mine footprint any blasting in those areas will permanently cease).

18. For costings, I have drawn on a 2024 report prepared by NZIER for DOC,[2] which found that the gross value of ecological services per hectare of DOC land was $1,900 per hectare per annum.

19. Applying this cost by way of the cost of the ecological services that the total loss of this land would represent, and using an 8% discount rate (the suggested rate by NZ Treasury), I calculate the Net Present Value of the land affected to be $2.5 million.

20. Sensitivities can be considered, to understand how this value might change if a different cost per hectare per year was used (a scalar of $1900). For example, a Motu paper[3] found ranges of $1661-$4,679 in 2025 prices for conservation land. Even at the high end of this range, the estimated cost (NPV) of ecological services in my calculation would be $6.1 million.

21. However, this cost assumes the total loss of all ecological services within the disturbance and vibration footprints, which is not consistent with the mitigation, management, and offsetting conditions. In addition to the mitigation, management and offsetting conditions is the payment of compensation to DOC as part of Access Arrangement proposed conditions.

2 https://www.doc.govt.nz/about-us/our-role/managing-conservation/assessing-the-value-of-public-conservation-land/

3 https://motu-www.motu.org.nz/wpapers/22_11.pdf

22. I estimate, based on the proposed schedule of compensation payable to DOC, that the NPV of that compensation over the life of the project will be $7.7 million. That is, the compensation payments outweigh the costs by $5.2 million.

23. When I then look at the local expenditure that will take place as a result of the project (wages, payments to suppliers, royalties and corporate taxes), the NPV (again using an 8% discount rate) over the life of the project is $1.461 billion. I have explicitly excluded any payments to foreign suppliers and repatriated profits as noted earlier. Given this spending would not occur unless the gold and silver resources were mined, this is marginal new spending in the New Zealand economy, initially from the FDI and then through a share of the export revenue that is spent in New Zealand.

24. Even if we take a very narrow view of the marginal new spend, assuming that all payments to wages and suppliers displace other activity (which is very doubtful), and ignore both the compensation payable to the Department of Conservation and the proposed $8.4 million of Biodiversity Project funding, the NPV of the royalties ($47.9 million) and corporate tax on profits ($303.9 million) each far outweigh the (conservatively estimated) monetised costs to ecosystem services.

25. The benefit to cost ratio is 592.

26. I appreciate I have not costed all of the effects from the proposal, but even so, I believe the results speak for themselves.

27. This project has very high economic value and when assessed alongside its environmental effects as mitigated, managed, offset and compensated that value provides a strong basis for the conclusion that the benefits far outweigh the costs.

Computable General Equilibrium

28. The PCE also suggests the use of a Computable General Equilibrium (**CGE**) model. That would be a large exercise taking an extended period of time, which I do not have available to me for this response. Nevertheless, I can provide some comments on the key judgments that such a model would help make.

29. I have some experience with CGE models in my previous workplaces of Sense Partners and NZIER. While it is not my area of deep expertise, I have assisted in various projects where a CGE model was used to interpret and communicate the results.

30. My view is that the key insight from a CGE in this case would be to better understand the substitution effect. That is, would the introduction of new endowment capital (the gold and silver resource) and FDI displace other capital and investments, whether the labour resources for mining will be cannibalised from other parts of the economy or lift overall employment outcomes, especially at the local level, and whether the exchange rate will be raised reducing competitiveness of other exporters.

31. The first judgement is around FDI. Would this $1 billion of investment displace other FDI, or would the FDI from OceanaGold happen anyway in another project in New Zealand? It is my considered view that OceanaGold's investment would not displace other FDI into New Zealand, because it would not compete with the usual FDI into New Zealand. Three quarters (75%) of FDI in New Zealand as at March 2024[4] occurred in five industries: financial and insurance services; manufacturing; wholesale trade; agriculture, forestry, and fishing; and rental, hiring, and real estate services.

[4] https://www.stats.govt.nz/information-releases/balance-of-payments-and-international-investment-position-year-ended-31-march-2024/

32. The second judgement is whether OceanaGold would simply invest this $1 billion in some other investment in New Zealand. Such a large investment would not occur unless there was an alternative viable gold-mining project within New Zealand ready to take the place of WNP. This issue can be discounted.

33. The third judgement is whether the employment would be additional, or there would be substitution. We can say with confidence that the employment directly in the mine and contractors are unlikely to exist without this project. Would this project lift incomes in the economy (that is produce a higher cost of labour for employers) and reduce employment in other industries as a result? At the local level this would show up as a reduction in non-mining jobs when mining jobs rise. That is, the growth in gold mining jobs would be *negatively* correlated with jobs in other parts of the economy. Data for the Hauraki District, sourced from Statistics New Zealand's Business Demography[5], shows the correlation between gold mining and other jobs is strongly *positively* correlated (a correlation of 0.59, where 1 is perfectly correlated).

34. This is consistent with the analysis I have supplied, where I have broken down the effects at local, regional and national levels. Because the effects are large at the local level, we can observe the effects of mining on the local labour market. But at regional and national levels, there are clearly many other confounding factors at play, and these correlations cannot be easily observed.

35. It is my considered opinion, based on the history of the Hauraki District, that mining jobs growth increases overall employment in the district.

36. The final consideration is whether the increase in gold exports will cause the NZD exchange rate to appreciate making other exporters less competitive. While the project would be a boost to NZ exports (an average

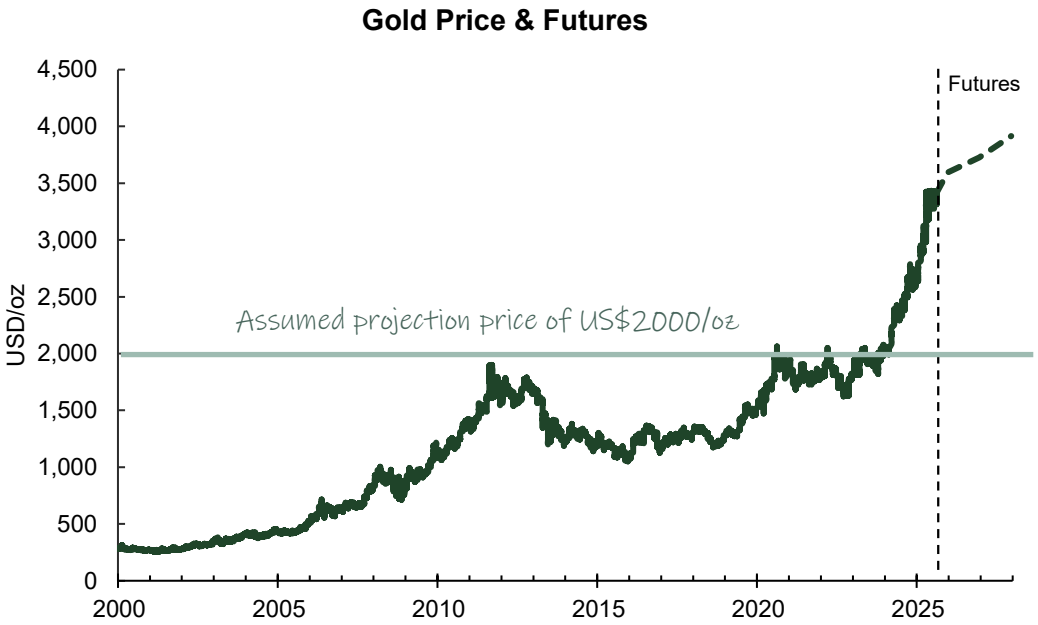
[5] Geographic units by area (district and regional) and industry 2000-2024.

of $286 million pa; the counterfactual is zero), it is a relatively small part of overall exports of $77 billion in the year to July 2025. New Zealand exports are dominated by agricultural commodities, and the exchange rate is correlated with these prices. There is limited effect on the exchange rate from FDI, because much of the capital flows into New Zealand tend to be associated with banking and portfolio flows. The NZD is also extremely variable, with the NZD/USD exchange rate ranging from 0.40-0.87 since 2000. Meaning any minor effects would be swallowed up by other factors. In my view, it is very unlikely that the project would alone affect export competitiveness of non-gold exporters.

Suggestions that the WNP's benefits are overstated

37. I firmly disagree with the suggestion in various comments that the benefits are overstated.

38. The gold price that has been used to assess export revenue of $5.151 billion, and associated taxes and royalties is USD 2000 / oz at an exchange rate of NZD/USD 0.61. That compares with the gold price history shown below (the spot price on 28 August 2025 was USD 3417 per oz) and an average exchange rate for the 12 months to 28 August 2025 of NZD/USD 0.59. The project would generate export revenue, at today's NZD gold price, of over $9 billion:



Source: MacroBond, CME Group

Figure 2: The chart shows the historical spot price of gold in USD per Oz, and futures market prices from CME Group.

39. As explained above, the economic analysis provides breakdowns of the employment created by the project. The underlying data was provided by OceanaGold based on its 35 years of experience developing and operating mining projects in New Zealand, using both contractors and "owner-mining" workforces. The application includes a detailed discussion of the expected workforce composition across the life of the project.[6] With this data I was able to confine my assessment to NZ employment effects only.

40. Many of the jobs associated with mining are not a straight substitution from other sectors of the economy, due to their specialist skillset. OceanaGold trains many of its employees – as noted below almost a quarter of the Waihi workforce attended Waihi High School. I am aware that some workers currently taking up employment in mining operations within New Zealand have transferred from two, large completed or soon to be completed tunnelling projects in Auckland. Some workers are joining mining operations within New Zealand from previous mining jobs in Australia (and these are often returning New Zealanders). It is incorrect to characterise the mining

[6] B.57. *Social Impact Assessment*, part 2.4

workforce as readily transferable into equally productive jobs in other sectors.

Ngati Porou ki Hauraki

41. Ngati Porou ki Hauraki (**NPKH**) say that the benefits appear to be overstated and asserts that most of the benefits will flow overseas.

42. I have addressed these concerns in my comments above.

43. It is unrealistic to suggest that FDI, which will be substantial, should occur without generating a return for those same foreign investors.

44. Concerns about ongoing economic disparity in the Waihi area are not new.[7] There appears to have been a leap here, to suggest a causal link between mining activity and persistent social deprivation in the Hauraki District, and Waihi. However, I do not consider this to be the case.

45. Economic activity can co-exist with high levels of measured deprivation. In New Zealand, the most widely used and reported measure of poverty is the New Zealand Index of Deprivation published by the Wellington School of Medicine, University of Otago. It compiles characteristics across a range of issues, including unemployment, income, access to food, clothing, shelter and heating. The index was developed to assist the development of:

    a. funding formulae for District Health Boards;

    b. research into relationships between socioeconomic deprivation and health outcomes; and

    c. for the support of community groups advocating for extra resources for community-based services.

[7] Ngāti Porou ki Hauraki Comments on Waihī North FTAA Application dated 25.5.25, paragraph 80.

46. While useful for its intended purpose, care is required in extending its use to broader economic issues, e.g. it is not a measure of economic activity or the associated benefits/disbenefits.

47. Most often, the visible data point associated with deprivation tends to be very low personal income, which limits a person's choices. Decades of research on economic inequality has shown that economic growth alone is not enough to reduce poverty. There may be many reasons why there are pockets of deprivation alongside strong economic activity such as mining. Poverty is often accompanied by other factors, such as health issues, addiction, and low education attainment. The underlying causes of poverty and income disparity cannot be solved by local employment opportunities alone and are often difficult to solve. Social policies through central government are the main poverty alleviation channel in New Zealand.

48. Some people appearing in the income statistics are not economically active. Retired people for example are not affected by local or current economic conditions. Rather, their incomes are related to their own savings and government contributions. Changes in local economic conditions will not affect their economic wellbeing. In the Hauraki District, over the decade to 2023, the population has grown by over 3,500 people. Just under half of this growth has been from the working age population, while the remainder has been mostly seniors.

49. The growth in the population has also not necessarily been caused by local employment growth. Tax data shows that the number of employed people (paying PAYE) has grown by just under 2,000 people. But this figure includes only 473 more locally located jobs. The remainder are 'net' commuters (i.e. those commuting out, net of those commuting in). While local employment conditions matter, the data shows very clearly that the marginal demand to live in the district is from retirees and commuters, which affects the median income of the district and also limits the extent to which increases in the mining workforce will be seen in local income statistics.

50. A relevant reason for deprivation persisting alongside the strong economic activity of mining could be a mismatch between local labour force skills and the needs of the mine, perhaps due to a lack of education, skills or other barriers. In this scenario, growth in mining activity would draw in suitable labour from outside the region. This increases the population and economic activity of the region but does not necessarily improve the outcome for the locally unemployed or underemployed. However, there may be some spill-over benefits if the increase in economic activity leads to secondary jobs in other sectors, for example retail, which may draw from the local labour force. I am aware that based on Oceana's own internal workforce records 23.84% of the total workforce (contractors and employees) of the Waihi Mine attended Waihi High School, and that the majority of the workforce live locally[8] (that is, within a 30 minute drive of the mine[9]) suggesting that opportunities to employ local people at the mine are being taken.

51. Scope to take a structured approach to ensuring that opportunities continue to be taken to recruit and train locally in association with the Project are discussed in the Social Impact Assessment undertaken by WSP. These include:

    a. Measures targeted at the relatively high number of Waihi young people not in employment, education, or training (NEET). The 2018 Waihi NEET rate was 16.9% compared to the NZ average of 12.4%.[10] A skills development and training action plan would target increased employment opportunities through Waihi College.

    b. A requirement that contractors employ general labour from the local area where possible.

[8] B.57. *Social Impact Assessment*, Appendix 1, Workforce Accommodation Assessment, pages 17 - 18.
[9] B.57. *Social Impact Assessment*, Appendix 1, Workforce Accommodation Assessment, page 11.
[10] B.57. *Social Impact Assessment*, Appendix 1, Workforce Accommodation Assessment, page 16. The 2018 Waihi NEET rate was 16.9% and the Hauraki District NEET rate was 16.5%, indicating the high NEET rate extends beyond Waihi and remains relevant at the local area level.

Boom-bust and lose the resource overseas

52. Regarding concerns from the community around the so-called “boom and bust” nature of mining (sometimes also framed in terms of “short-term gain / long-term consequences”) and related concerns that the benefit of the resource is being lost overseas:

a. Mining is the economic extraction of a depletable resource. The counterfactual is that the economic activity, and associated benefits such as jobs, spending on suppliers, taxes and royalties, simply does not take place. Because the resource is either used or not used, the economic effects are relatively simple to assess. Economic activity can be described as a function of capital, labour and technology. In the case of mining, if the resource is not mined then that capital ‘endowment’ is not available for economic activity. It is binary.

b. A range of comments suggest that mining would mean that the value of the resource (gold and silver) is lost through allowing it to be mined. This is true of all mining activity. If the resources are not mined, they have no economic value. If they are mined, they add economic activity over the period of mining activity, and that stops when the resource is depleted and remediation has been completed. The resource is not lost; it is mined and sold in exchange for economic benefits.

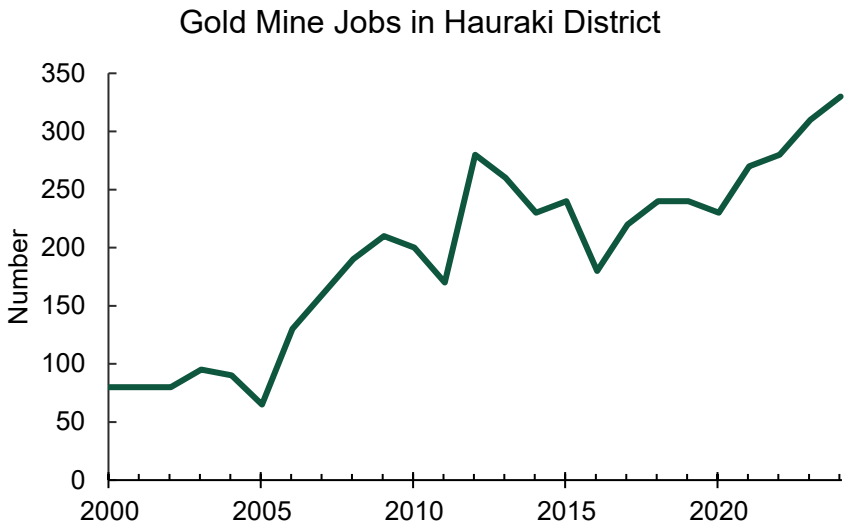
c. The consequences, such as environmental consequences – which form a significant portion of objections – are avoided, remedied and mitigated where possible, offset, or compensated. There are trade-offs, but the conditions of the associated approvals are designed to ameliorate these adverse effects, to levels that are acceptable both during mining and post-mine closure. In my view, it is not the function of economic analysis to substitute monetised values for the active management and enforcement of conditions of consent.

d. Various submitters raise concerns over the loss of the gold and silver resource overseas. Gold and silver have no economic value until they

are discovered, and that discovery is quantified through exploration drilling and geological modelling in order to establish the prospects for their economic extraction. I am aware that Oceana's investors have funded over $80 million of exploration activity to date at Wharekirauponga. If a gold or silver resource has no prospects of being mined, it will have no economic value. The use of foreign capital to create the conditions for its extraction does not alter the benefits to New Zealand via local spending.

e. Mining, while finite, is not necessarily short-term. Both the Waihi and Macraes mines have been operating for 35 years. Underground mining began development at Macraes in 2006 and at Waihi in 2004. In both cases, the expected life of those mines when they began development was less than 10 years. Today, I understand that both mines employ a third generation of mine workers – the grand children of people who started work over 30 years ago.

f. The data shows that gold mine jobs in Waihi have not been transient, in the sense that jobs have generally increased (figure below). Although there have been periods of decline, especially when production was affected by the slip in the Martha open pit. Over the last decade, employment in the mine has increased. The Waihi North Project will extend mining operations at Waihi, in circumstances where operations would otherwise be forecast to end in 2032.



Source: Statistics NZ (LEED).

Figure 3: The number of filled jobs in gold mining in the Hauraki District

g. Statistics New Zealand data shows that tenure of employment in the mining industry is longer than the economy wide average. That is, mining industry workers are likely to have been in the same job for longer than is usual across the economy. The data does not show gold mine jobs to be transient.

h. Submissions invite government efforts to support local economies. The current government is pursuing regional economic development via a range of initiatives, including attracting FDI, its Minerals Strategy for New Zealand to 2040 (with a goal to double the value of exports) and in reducing the time needed to secure the necessary approvals forlarge projects that make important regional or national contributions (the Fasttrack process). All three are relevant for this project.

53. Regarding housing availability and affordability,[11] this is an acknowledged impact[12] and will be actively managed. I understand this matter will be addressed further in the evidence from Mr Kyle Welten.

Coromandel Watchdog

Comments on costs and benefits

54. It is suggested that cost-benefit analysis is required to quantify net benefits.[13] The Treasury direction referred to needs to be read in the context of an FTAA process, which already sets out the detailed assessment approaches that are required to quantify and manage the impacts of the project on the social, cultural and natural environment. The economic benefits assessment has not been presented in a cost-immune vacuum, as suggested. Nevertheless, I have addressed this issue comprehensively in response to the PCE's comments (refer above).

55. Again, the suggestion that the analysis "exaggerates" the benefits, or that it is an attempt to be "selective" in the assessment of effects, is strongly refuted and is addressed above. Similarly, the company is not "betting on" an improvement in the socio-economic situation in Waihi. The relevant counter-factual is the loss of the mine that is currently operating there when that operation closes in 2032, without the continuity that the project would otherwise provide. No one is suggesting, in the comments that I have seen, that the closure of the current operations would go unnoticed from an economic perspective.

56. Concerns about "leakage" of benefits to overseas parties are addressed in my comments above. The Applicant's parent company reports annually on

[11] Ngāti Porou ki Hauraki Comments on Waihī North FTAA Application, paras 84 and 87.

[12] B.57. *Social Impact Assessment*, section 6.2.5.

[13] Initial Submissions for Coromandel Watchdog of Hauraki Inc dated 25 August 2025, pages 12 and 17; Preliminary submissions of Counsel for Coromandel Watchdog of Hauraki Inc dated 25 August 2025, para 3.3.

the split of expenditure across local, national and international suppliers, with the reporting for Waihi showing the following:[14]

Description	GRI & SASB	Unit of Measure	FY 24	FY 23	FY 22
Period Ended On (MM/DD/YYYY)			12/31/2024	12/31/2023	12/31/2022
Reported Date (MM/DD/YYYY)			05/22/2025	05/03/2024	05/15/2023
Procurement					
Waihi					
Amount spent with local suppliers		$USD	40,533,156	12,312,113	25,028,143
Amount spent with national suppliers		$USD	59,459,955	61,955,335	47,252,445
Amount spent with international suppliers		$USD	18,148,457	19,305,001	15,664,730
Total amount spent with suppliers		$USD	118,141,567	93,572,449	87,945,318
Percentage of procurement spent with local suppliers		Percentage	34%	13%	28%
Percentage of procurement spent with national suppliers		Percentage	50%	66%	54%
Percentage of procurement spent with international suppliers		Percentage	15%	21%	18%

Source: OceanaGold Interactive Analyst Centre

Figure 4: OceanaGold regularly publishes where its spending takes place

57. Expenditure on wages, taxes and royalties, and capital and operational expenditure are similarly reported. Income, capital expenditure and operating expenditure are transparently reported by site,[15] and the suggestion that more than half of the revenue generated at Waihi accrues to the company's shareholders is wrong. The Prefeasibility Report[16] for the combined Waihi mining operations (noting the report is based on Mineral Reserves only and combines the Martha and Wharekirauponga underground mines – so it is not an "apples with apples" comparison) estimates a post-tax Internal Rate of Return (NPV at a 5% discount rate) of 9.2 - 24%.

58. The comments (page 13) also take issue with the assessed tax projections and call assumed revenue and margins "fantastical". The project is profitable, but the nature of mining (and the WNP in particular) means that expenditure is highest, and occurs over an extended number of years, before production starts. This has implications for the NPV. The NPV of the tax and royalty numbers (using an 8% discount rate) is:

[14] https://vbench.virtuaresearch.com/IR/IAC/?Ticker=OGC2&Exchange=TSX#
[15] https://vbench.virtuaresearch.com/IR/IAC/?ticker=OGC&exchange=TSX#
[16] https://ogc.irmau.com/site/pdf/a6922c71-c6fd-49b8-90c7-57ddab50aab1/Waihi-District-NI43101-Technical-Report.pdf?Platform=ListPage

a. Corporate tax: $303.9 million

b. Royalties: $47.9 million

59. I have worked closely with the project financials to understand the tax and royalty implications. As noted above, revenue has been conservatively estimated at a gold price of USD 2000 per ounce.

60. Regarding "key dependencies" on tourism (which it is said will be placed at risk) (page 16) in 2024 tourism made up $85.5 million of spending or 9% of Hauraki District's Gross Domestic Product (**GDP**) and $278.7 million of spending or 21% of GDP for the Thames-Coromandel District[17]. Impacts on tourism (which are theoretical only) would only ever be a small portion of a small part of the local economy.

Concerns around climate change

61. Regarding emissions,[18] the annually reported emissions intensity of the existing Waihi underground operation relative to the predominantly open pit Macraes operation demonstrates the reduced emissions intensity of underground mining:

Description	GRI & SASB	Unit of Measure	FY 24	FY 23	FY 22
Period Ended On (MM/DD/YYYY)			12/31/2024	12/31/2023	12/31/2022
Reported Date (MM/DD/YYYY)			05/22/2025	05/03/2024	05/15/2023
Emissions Intensity					
Didipio		tCO2e/Oz Au	1.22	0.89	1.02
Haile		tCO2e/Oz Au	0.47	0.70	0.67
Macraes		tCO2e/Oz Au	0.57	0.53	0.53
Waihi		tCO2e/Oz Au	0.19	0.17	0.17
Total	GRI 305-4	tCO2e/Oz Au	0.61	0.65	0.67

Source: OceanaGold Interactive Analyst Centre

Figure 5: OceanaGold regularly publishes the carbon emissions intensity of its mines, which shows Waihi is very low intensity

[17] Tourism spending data from MBIE's tourism dashboard here: https://teic.mbie.govt.nz/ste/regions/relianceOnTourism/ and MBIE's territorial authority GDP estimates here: https://www.mbie.govt.nz/business-and-employment/economic-growth/regional-economic-development/modelled-territorial-authority-gross-domestic-product/2025-release

[18] Coromandel Watchdog of Hauraki Inc, Appendix B.01.

62. Statistics New Zealand reports emissions intensity by industry[19]. This measure looks at the emissions generated during the process of economic value creation in New Zealand, equivalent to Scope 1 emissions used for company reporting purposes[20]. This means that emissions in suppliers are not counted in this measure.

63. The latest detailed industry data set is for the 2022 year. Emissions intensity is shown as tonnes of CO2e emissions per $1 million of GDP contribution[21]. We have calculated the emissions for the Waihi operation using Scope 1 emissions of 6,774 tonnes of CO2e[22] and GDP contribution of $114 million in 2022. Waihi gold mine's emissions per dollar of GDP is 73% lower than the total New Zealand economy.

Industry	CO2 tonne/$m GDP
Agriculture	2698
Non-metallic mineral product manufacturing	812
Electricity, gas, water, and waste services	735
Metal product manufacturing	677
Mining	514
Transport, postal, and warehousing	382
Petroleum, chemical, polymer, and rubber product manufacturing	345
Furniture and other manufacturing	322
Food, beverage, and tobacco product manufacturing	295
Local government administration	276
Forestry and logging	252
Total all industries	217
Wood and paper products manufacturing	141
Fishing, aquaculture and agriculture, forestry and fishing support services	97
Textile, leather, clothing, and footwear manufacturing	91
Construction	76
Waihi Gold Mine	59
Transport equipment, machinery and equipment manufacturing	30
Administrative and support services	26
Wholesale trade	25
Printing	23
Accommodation and food services	20
Arts and recreation services	19
Retail trade	17
Health care and social assistance	15
Other services	14
Central government administration, defence and public safety	13
Education and training	6
Information media and telecommunications	4
Professional, scientific and technical services	4
Rental, hiring and real estate services	3
Owner-Occupied Property Operation	2
Financial and insurance services	1

Source: Data for the economy are sourced from Statistics NZ, and the Waihi gold mine from company sources.

Figure 6: The table above shows the amount of Scope 1 CO2e emissions per $1 million of GDP.

19 https://www.stats.govt.nz/assets/Uploads/Greenhouse-gas-emissions-industry-and-household/Greenhouse-gas-emissions-industry-and-household-Year-ended-2022/Download-data/greenhouse-gas-emissions-industry-and-household-year-ended-2022-intensity.csv

20 Scope 1 emissions are direct greenhouse gas emissions from sources that an organisation owns or controls.

21 Using published nominal GDP data from Infoshare table SNE048AA.

22 https://vbench.virtuaresearch.com/IR/IAC/?Ticker=OGC2&Exchange=TSX

Forest & Bird

64. Forest & Bird suggest that Canadian ownership "very much reduces" the economic benefits.[23] As per my comments above, the benefits have only been assessed in terms of in-country spend-effects and NZ-based employment. Tax and royalties are payable on the profits, ahead of any "repatriation" of the profits offshore, and those same profits fund capital and operational expenditure.

65. Nor is the relevant counterfactual asking whether the benefit would be greater under a different ownership structure. My analysis specifically looks at the effects of spending in NZ, and provides the export and FDI comparison as important comparators to national direction on what constitutes nationally significant investment.

Dated: 1 September 2025

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Shamubeel Eaqub

[23] Comments by Royal Forest and Bird Protection Society of New Zealand Incorporated, para 83.

Appendix A

DOC. Appedix F. Table 4, page 32

				Loss of diversity values							
Item	**Industrial intrusion**	**Impact of use of drill rig on site**	**Impact of use of helicopters between 23rd December to 6th Jan and during statutory holidays**	**Impacts of creation of campsite and helicopter landing area – one off fee.**	**Impacts of vegetation clearance and works to create new drill site**	**Impacts of creation of vent shaft sites**	**Impacts of reuse of an existing drill site each reuse**	**Impacts of removal of trees (when unable to be avoided). Sliding scale relating to diameter at breast height**	**Impacts on Archey's frogs where located prior to, during use, or within the wider clearance site of drill, vent/ pump sites or man portable drill sites**	**Impact on Hochstetter's frogs or At Risk or Threatened lizards located prior to, during or within the wider clearance site of drill, vent/pump sites or man portable drill sites**	Total
Rate (ex GST)	80000	100	750	1300	6500	10000	1300	125-3000	2500	750	
Rate to use?	80000	100	750	1300	6500	10000	1300	1562.5	2500	750	
Unit	pa	per drill rig per day	per day	One off	New drill sites	Number of vent shafts	site reuse	Per tree felled	per identification	per identification	pa
Quantitiy											
Year 1	1	2,190	10	-	21	-	-	450	105	-	
Year 2	1	2,190	10	-	19	-	-	300	95	-	
Year 3	1	2,190	10	-	14	2	-	1,240	90	-	
Year 4	1	2,190	10	-	4	-	-	300	20	-	
Year 5	1	2,190	10	-	2	-	-	150	10	-	
Year 6	1	2,190	10	-	-	-	-	-	-	-	
Year 7	1	2,190	10	-	10	-	-	-	50	-	
Year 8	1	1,825	10	-	-	2	-	940	20	-	
Year 9	1	1,825	10	-	-	-	-	-	-	-	
Year 10	1	1,825	10	-	-	-	-	-	-	-	
Year 11	1	1,825	10	-	-	-	-	-	-	-	
Year 12	1	1,825	10	-	-	-	-	-	-	-	
Year 13	1	1,825	10	-	-	-	-	-	-	-	
Year 14	1	1,825	10	-	-	-	-	-	-	-	
Year 15	1	1,825	10	-	-	-	-	-	-	-	
Year 16	-	1,825	10	-	-	-	-	-	-	-	
Year 17	-	1,825	10	-	-	-	-	-	-	-	
Year 18	-	1,825	10	-	-	-	-	-	-	-	
Value $											
Year 1	80000	219000	7500	0	136500	0	0	703125	262500	0	1408625
Year 2	80000	219000	7500	0	123500	0	0	468750	237500	0	1136250
Year 3	80000	219000	7500	0	91000	20000	0	1937500	225000	0	2580000
Year 4	80000	219000	7500	0	26000	0	0	468750	50000	0	851250
Year 5	80000	219000	7500	0	13000	0	0	234375	25000	0	578875
Year 6	80000	219000	7500	0	0	0	0	0	0	0	306500
Year 7	80000	219000	7500	0	65000	0	0	0	125000	0	496500
Year 8	80000	182500	7500	0	0	20000	0	1468750	50000	0	1808750
Year 9	80000	182500	7500	0	0	0	0	0	0	0	270000
Year 10	80000	182500	7500	0	0	0	0	0	0	0	270000
Year 11	80000	182500	7500	0	0	0	0	0	0	0	270000
Year 12	80000	182500	7500	0	0	0	0	0	0	0	270000
Year 13	80000	182500	7500	0	0	0	0	0	0	0	270000
Year 14	80000	182500	7500	0	0	0	0	0	0	0	270000
Year 15	80000	182500	7500	0	0	0	0	0	0	0	270000
Year 16	0	182500	7500	0	0	0	0	0	0	0	190000
Year 17	0	182500	7500	0	0	0	0	0	0	0	190000
Year 18	0	182500	7500	0	0	0	0	0	0	0	190000
NPV											$7,720,073.24
Rate (nominal)	8%										

Ecological services value per ha pa

Motu	2400	per ha per year	1997	waikato	4678.75	infl to 2q25	https://motu-www.motu.org.nz/wpapers/22_11.pdf
Motu	1250	per ha per year	2016		1660.95	infl to 2q25	
NZIER		$pa/ha	1900.34881	Gross	8,640,519	land doc	https://www.doc.govt.nz/globalassets/documents/about-doc/role/managing-conservation/assessing-the-value-of-pcl/the-value-of-public-conservation-land.pdf
		$pa/ha	1261.498297	Net'	16.42	Gross	
Discount rate	8%	Nominal			10.9	Net'	https://www.treasury.govt.nz/information-and-services/public-sector-leadership/guidance/reporting-financial/discount-rates
	6%	Real					
Land area proposed	0.66	ha					
Total land area	0.84	ha					
Vibration exposed	314	ha					

	Vibration	Site	Value	
Year 1	-	1	1596	
Year 2	-	1	1596	
Year 3	-	1	1596	
Year 4	-	1	1596	
Year 5	-	1	1596	
Year 6	-	1	1596	
Year 7	-	1	1596	
Year 8	1	1	598306	
Year 9	1	1	598306	
Year 10	1	1	598306	
Year 11	1	1	598306	
Year 12	1	1	598306	
Year 13	1	1	598306	
Year 14	1	1	598306	
Year 15	1	1	598306	
Year 16		1	1596	
Year 17		1	1596	
Year 18		1	1596	
Total		4802409	0	
NPV		$2,481,615.34		

	$m, NPV	
Ecological services lost	$2.48	$2,481,615.34
Compensation to DOC	$7.72	$7,720,073.24
Net benefit/(cost)	$5.24	$5,238,457.90
Marginal new spending in NZ	$1,461.01	
Total benefits	$1,468.73	
BCR	591.8	
New spend Royalties & corproa	352	
Total benefits	$359.53	
BCR	$144.88	

Public Sector Discount Rates (Real)	Year 1-30	Year 31-100	Year 101+	Sensitivity test (mandatory)
Non-commercial proposals (SRTP)	2%	1.5%	1%	8%
Commercial proposals (SOC)	8%	8%	8%	2%

The Treasury intends to review these rates every three years, the next review to be in 2027.

The 2024 Treasury circular provides further information on the expectations and the background documents outline how the discount rates are derived. These are available below, along with expert reports which informed updates to the public sector discount rates. CBAx, the Treasury's CBA tool, includes the rates.