

Why Did the Aramoana Smelter Not Proceed?

TOSH STEWART

University of Otago

Abstract

The Aramoana smelter proposal of 1980-1983 sparked a major New Zealand environmental controversy, which ended in the abandonment of the project and the protection of Aramoana with reserve status. What led to this result? There is a widespread perception that the collapse of the project was due solely to economic factors rather than the energetic “Save Aramoana Campaign” against the smelter. I reconsider and reevaluate the evidence, and argue that while the economic factors were undoubtedly important, the protest movement was also influential on the final outcome.

Part I: The Proposal, The Protests, And The Economics

A few years after New Zealand's first aluminium smelter began operating at Tiwai Point, a second was proposed. The proposal became serious in 1980, when a consortium put together by Fletcher Holdings received a promise of subsidized electricity from Robert Muldoon's National government. The smelter was to be built at Aramoana at the heads of the Otago Harbour, near Port Chalmers and Dunedin.

This was a colossal undertaking. The proposal called for reclamation and modification of Otago Harbour, and construction costs approaching \$1 billion. The power consumption of the smelter was to have been greater than the combined demand of the Wellington and Christchurch urban areas - and just under one sixth of the combined 19,039 GWh that were sold in all of New Zealand during the year ended 31 March 1980.¹

As Cabinet papers noted, "in terms of physical size, likely financial cost and returns, and employment, the [Aramoana smelter] is one of the biggest [development projects] to be proposed in New Zealand."² Economist Paul van Moeseke pointed out that the investment outlay was greater than the costs envisaged at that time for a single-track Channel Tunnel between the UK and France, and would massively exceed the sum total of all private savings in New Zealand.³

The proposal was met with ferocious opposition from one of the most innovative and dynamic protest movements in New Zealand history, which propelled the debate to national prominence. Aramoana was one of the biggest news stories in New Zealand throughout 1980-1982. As a reporter observed in 1982: “Environmentally, economically, politically, the Aramoana smelter has come to symbolise so much for detractor and devotee alike.”⁴ Nonetheless, in the intervening years the story has not received the attention it deserves and for want of substantial scholarship it has become something of a forgotten episode.⁵

The smelter never proceeded. What went wrong? Two causes are often mentioned. First, the demise of the smelter is attributed to the success of the protest movement. For example, in a letter to Campaign Power Poll members, organisers Keith Johnston and Patricia Sarr declared: “Congratulations to you all! It was your efforts, your belief in and work on behalf of the democratic process, which has won this victory.”⁶

Second, the demise of the smelter is attributed to a high-level economic deterioration in the business case – particularly the global drop in aluminium prices. For example, as Barry Downey, Executive Director of Fletcher Aluminium Ltd put it: “The decision not to go ahead was related solely to the world economic situation.”⁷

It may seem logical that both of these candidate causes played their own role and contributed to the failure of the project – and indeed that contention is the central thesis of this essay. However, in general the various commentators have emphasised one or the other of these two causes as being determinative of the end result, and in most cases the impact of the protests has been dismissed. A representative example comes from Vincent O’Sullivan in his biography of Ralph Hotere: “Opposition... was vociferous but nowhere enough to carry the day... When the government called off the smelter at the end of 1982, the protesters celebrated a major victory, although their principles in fact had little to do with how events turned out. It was the failure to reach agreement with international investors that brought the grand proposal down.”⁸

This view is also shared by many of the smelter proponents. Sir Bill Birch and Hugh Fletcher are both adamant that the protesters ultimately didn't influence matters.⁹

In other words, the flow has been either to puff the protest movement as a fairytale victory, or to dismiss it as an uninfluential irrelevancy. The former analysis has typically been extremely naive and partisan (and hence ultimately a disservice to the protest movement); the latter unduly hard-headed and oversimplified. The truth lies in between these accounts, in which the Save Aramoana Campaign and other protesters were successful in wielding influence, which in conjunction with external factors contributed to the defeat of the smelter proposal.

This essay draws upon much material previously unavailable, including Cabinet papers declassified for this purpose, as well as the confidential business records of the consortium held in the Fletcher Trust Archive, and interviews with many of the key surviving figures on both sides of the debate.

I begin with a brief outline of the historical background and context to the smelter and provide a skeletal chronology of events. I then provide further background for each of the two explanations for the failure of the smelter listed above. Finally, I argue in detail that each explanation is insufficient on its own and that a more nuanced account is required, bringing in elements of both explanations.

Background and Chronology

In 1979 Robert Muldoon's National Party was into its second term of government. In this period, New Zealand was psychologically and economically panic stricken by the results of the recent oil crises and by the economic turmoil created by the United Kingdom's entry into the European Economic Community and the consequent reduction in trade with what had been New Zealand's most important export destination.¹⁰

This context gave rise to the "Think Big" era of large scale energy intensive industrial developments, chiefly orchestrated by the "Minister of Everything" Bill Birch.¹¹ Birch and others perceived an incipient power surplus in New Zealand's electricity production, especially with the expectation of further generation (such as the Clyde Dam) coming on stream in the 1980s. The government called for interest from industry partners who were to be granted steep concessions on electricity for developments deemed to be in the national interest. Simultaneously, in shady circumstances, the government passed the National Development Act

- draconian legislation designed to create a "fast track" for such developments, and to impede the ability of stakeholders to delay or prevent them.¹² Thus, by December 1979, when the legislation passed, New Zealand had an attractive package to sell to interested bidders: cheap electricity for large-scale industry, and a blunt legislative cudgel with which to nudge any such proposals towards greenlight.

One successful bidder for this package was South Pacific Aluminium Ltd: a consortium put together by prominent New Zealand company Fletcher Holdings with the aim of creating an aluminium smelter. Fletchers held a 50% share in this consortium, and they were joined by two overseas partners who controlled the remainder of the equity. The first was a subsidiary of Australia's CSR, whose primary function was to supply the alumina for the smelter, and the second was Switzerland's Alusuisse, whose primary function was to supply the smelting technology and expertise. Within months Fletchers had merged with Challenge Corporation and Tasman Pulp and Paper to form Fletcher Challenge Ltd - at that point by far the largest and most powerful company in New Zealand. Among the reasons given for this merger was that it would allow for the financing of the Aramoana project.¹³

There was extensive investigation of possible sites for the smelter. For some time it seemed likely that a site at Wickliffe Bay on the Otago Peninsula might be chosen, and a location at Seadown near Timaru was also under consideration. But for various reasons, Aramoana was regarded as "the pre-eminently suitable site for locating an export orientated energy intensive industry" and in December 1980 it was selected by the consortium.¹⁴

Strong support was shown by many influential groups and people in Dunedin, including the mayor Sir Cliff Skeggs who declared "I for one do not want the city to stagnate and die...come hell or high water I will strive for that smelter and we are going to get it."¹⁵

Not everyone agreed that Aramoana was suitable, or that the city would die without a smelter. Numerous environmental and other interested groups raised objections. To name three: The Otago Acclimatisation Society (a branch of the organisation that later became Fish & Game New Zealand) raised funds and ran advertisements opposing the development in national publications. Mana whenua at the Ōtākou Māori Committee (a precursor to the current Te Rūnaka o Ōtākou) opposed the developments and organised two large hui at the local marae which drew in large numbers of manuhiri both supporting and opposing the smelter. The Aramoana League represented those with a land or property interest at the site, and consistently opposed the development.

However, by far the most energetic and intensive opposition came from the Save Aramoana Campaign. This was a diverse coalition drawing in numerous members of the above groups, as well as many others. The motivations of this group were similarly diverse, but the most important driver for their work was the imperative to protect the environmental and ecological qualities of Aramoana. Aramoana incorporates a distinctive and now quite rare intertidal salt marsh with "one of the few largely native lowland plant communities remaining in Otago."¹⁶ These tidal flats are also a traditional kaimoana source for local Māori, with Ōtākou elder Magda Wallscott remarking in 1980 "I still think the best cockles come from the area where they are going to build the smelter."¹⁷ Furthermore, the famous breeding colony of Northern Royal Albatross at Taiaroa Head lies just a few hundred metres from Aramoana at the closest point.

The full scale of the activities of the Save Aramoana Campaign can not be adequately explored here, but the most celebrated example is that the group raised publicity (and funds) by staging a massive rally at Aramoana a mere 24 hours after the site announcement, whence they declared Aramoana to be an independent state and seceded from New Zealand. A border post was set up and staffed. Passports were issued (at a price), visas were stamped (at a price), citizenship conferred (at a price), and so on. Independent State officials such as the Minister for Foreign Affairs wrote deadpan letters to various ambassadors. The Independent State produced "cinderella" postage stamps, which again, raised funds and awareness. A travelling embassy of the Independent State - a repurposed and colourfully decorated (aluminium!) caravan – toured throughout New Zealand, raising awareness and selling wares at dozens of locations.¹⁸

Through such stunts the Save Aramoana Campaign propelled the smelter into the national consciousness. During the election year of 1981, the tension bubbled away, notwithstanding being overshadowed by the Springbok tour in the second half of the year. The Campaign sustained efforts, the consortium continued extensive planning and preparatory work, and the government worked out the details of the power supply agreement.

Then, at the start of October 1981, three days after Muldoon triumphantly declared that all outstanding issues "of any consequence" in the negotiations with the consortium were settled, Aluisuisse departed the consortium in a bombshell announcement. This left the government and the remnants of the consortium in a very tricky position. For the next 12 months Fletchers tried to salvage the deal with a replacement partner from the aluminium industry. While they did attract the French company Pechiney to take Aluisuisse's place, after much discussion negotiations finally broke down again towards the end of 1982. A Planning Tribunal decision in 1983 further complicated development ambitions for Aramoana, and then in 1990 the granting of reserve status to the area secured its long term protection.

The Protest Strategies

The protest movement set out to stop the smelter, and the smelter was stopped. Accordingly, there is a reasonable *prima facie* inference that the campaign of opposition was responsible for the demise. To examine the possible causal relationship between these two matters, close scrutiny of the strategies of the protesters is necessary. In brief the approach of the Save Aramoana Campaign was: first, to prepare and publicise a programme of non-violent direct action against the smelter works; second, to raise funds and use them to aggressively pursue all avenues for legal challenge of the project; and third, to raise publicity in a concerted effort to erode political support for the project. In this section I will expand on each of these three strands in turn.

The Save Aramoana Campaign sought to convince the overseas partners in particular that they would be in for a major headache if works proceeded, because the campaign was committed to a programme of non-violent direct action against any attempts at construction. The Campaign was strongly influenced by ideas of non-violent resistance and key members were well versed in the theories of overseas non-violent direct action exponents such as Mahatma Gandhi and Gene Sharp, as well as the history of peaceful resistance at Parihaka. One of the Save Aramoana Campaign members, Angela Baker, descended from members of the Independent State of Hawera set up by colonial settlers in response to Parihaka, and this provided the initial inspiration for the Independent State of Aramoana.¹⁹

The campaigners appeared willing to take significant risks in the operationalisation of these theories. For example, at a meeting with police in January 1981, a Save Aramoana Campaign

deputation, including spokesperson Heather Simpson (later to achieve prominence as Prime Minister Helen Clark's chief of staff) refused to commit to obeying the law, saying: "We do not guarantee there will be no illegal actions, just nonviolent. Any such actions will be well planned and Police will be informed."²⁰ Similar sentiments were conveyed to the various consortium partners, including at meetings in Sydney and Auckland.

The declaration of independence and the establishment of the border post at the bottleneck entrance to Aramoana was an overt portent and signal of the intentions of the Save Aramoana Campaign to escalate and mobilise their activity. The central message of protesters was always some variation of "there is no intention to close the border *yet*." The implied threat was that if works progressed, the border would be closed, and the consortium and their state allies would be forced into ugly scenes of dislodging committed, trained activists from in front of bulldozers.

Another strategy was to slow things down and increase expense through legal action. The Save Aramoana Campaign spun off a separate organisation dedicated to litigation, called the Committee for the Rational Economic and Environmental Development of New Zealand (CREEDNZ). Along with other co-litigants such as the Environmental Defence Society, CREEDNZ launched several legal challenges, beginning with an attack on the use of the National Development Act 1979.

Despite CREEDNZ chairman Richard Thomson's insistence that the lawsuits were not merely intended as a vexatious irritant ("I am not in the business of spending \$50,000 just to be a nuisance."), one can understand why the consortium had that perception.²¹ Though these early legal efforts were mainly rejected by courts, they created significant alarm amongst the consortium. For example, South Pacific Aluminium head Jack Smith remarked in response to the first lawsuit: "Any long delay must put the project at risk... These sorts of tactics could succeed and cause delay. Such delays are very time consuming and costly to fight...If the project could not proceed at Aramoana, it would be delayed one or two years at least. The whole project would very much have to be assessed again."²²

Finally, the Save Aramoana Campaign worked hard to raise public awareness and to exert political pressure on the main decision makers. Influencing the government was not easy, as the Think Big projects were a key element in their strategy for winning the 1981 election. Nonetheless doubts were created in the National party caucus, with Bill Birch recording in his diary for 25 September 1980: "caucus very scratchy about energy – on my feet for two hours defending power price and smelter."²³ Further, Fletchers' own internal intelligence reports, compiled by public relations firm Allen Fenwick Ltd, reported substantial differences of opinion and "strong reservations" within the government benches, noting in particular that some MPs were worried about "the political consequences for the Party, regardless of the merits of the smelter itself."²⁴

The protesters had still greater success with the Labour opposition. Generally speaking, throughout the early stages of the campaign the position of Bill Rowling's Labour party was one of timorous fence-sitting. Though some Labour MPs (for example Roger Douglas and Mike Moore) were suspicious of the smelter, other members were reluctant to undermine a new industry and new employment. Two of the Dunedin Labour MPs voiced strong support for the project (for example, Brian MacDonnell, the MP for Dunedin Central, wrote the lead article for a pro-smelter booklet published by the consortium).²⁵ Other senior Labour frontbenchers Bob Tizard and Warren Freer (both of whom had long-standing associations with

Fletchers) also were strongly supportive of the smelter.²⁶ However, as time went on and the publicity and protests grew, the position of Labour hardened against the smelter and in the lead up to the 1981 election Rowling's tone changed from equivocally supportive to equivocally opposed. For example, in a speech in Oamaru three weeks before polling day, he declared that the smelter was "away down on Labour's list of priorities" to the extent that he thought it "unlikely" it would go ahead.²⁷

The Save Aramoana Campaign targeted Alusuisse repeatedly, sending them correspondence and materials designed to emphasise the trouble the company would face if they proceeded with building works at Aramoana. Save Aramoana Campaign member Allan Cumming flew to Sydney on behalf of the Campaign and met with Alusuisse leadership. He recalls: "I made it clear that if they went ahead we would make it too expensive for them to proceed. I explained that access was bad and we could block the roads. We could make it extremely economically and politically difficult for them to build."²⁸

Similarly, members John Parker and Gregor Morgan met with Alusuisse representatives in Auckland who, having generally had news filtered through the New Zealand partner in the consortium, seemed surprised to hear the strength of resistance. Morgan recalls: "After the meeting one of the [Alusuisse] people said 'well I guess you don't want a smelter.' Yes, we're pleased that we've conveyed that to you. Poor Hugh Fletcher had two [Alusuisse] people whom he wanted to come and spend millions who had seen from these two [Save Aramoana Campaign] people that maybe they were representing a significant group."²⁹

Let us summarise the picture emerging. The Save Aramoana Campaign worked to defeat the smelter by deterring the overseas partners with the credible threat of non-violent direct action, by delaying the consortium via legal action, and by lobbying political parties and the public.

The Economic Deterioration

Let us now consider an alternative explanation as to why the smelter did not proceed – in brief that a high-level deterioration in the business case resulted from poor and changing economic conditions.

The most significant proximate economic deterioration was the huge slump in aluminium prices that took place in the later months of 1981. Certainly this is a reason pointed to by Alusuisse in their decision to withdraw. A contrast between the 1980 and 1981 company reports for Alusuisse shows how much the business optimism for the sector slumped in the space of that 12 month period. In 1980: "The aluminum market in the first half of 1980 was characterized by strong demand and favorable prices.... Investment plans for additional primary capacity are in the early stages of realization. Preferred regions for this expansion include Australia, New Zealand, and Mexico."³⁰

And then a year later: "The unexpected sharp decline in demand for aluminum, especially in the final months of 1981, led to major difficulties. The initially planned investments in production expansion had to be reconsidered, and in some cases postponed or cancelled."³¹

Clearly the economics of the smelter were underpinned by optimism around the long-term price of aluminium. In a speech in Dunedin in October 1980, Bill Birch laid out the sanguine thinking of the times in simple terms: "Our calculations were based on an aluminium price of \$1,600 a tonne... and the assumption that this price would not increase in real terms over the life of the project. In fact, in an increasingly energy short world, the demand for aluminium

will inevitably increase and this, together with rising energy costs world wide, leads one to confidently expect that the price of aluminium will increase in real terms." ³²

Birch's analysis here sounds simplistic and bordering on the naive, but it was backed up by the government's confidential assessments from Treasury and external consultants. For example, Cabinet papers as late as September 1981 record officials as saying that prices are more likely to rise than to fall, and this was also the view of independent consultant Stewart Spector engaged by the Prime Minister's office.³³

The prospect of price rises was important to the government, in part because the agreed "escalator" in the power supply agreement with the consortium was to be the world-wide price of aluminium: if the value of the outputs from the smelter rose, so too would the money paid to the New Zealand government for supplying the massive quantities of input electricity. A slump, on the other hand, would tip the balance squarely into the deficit column for the government, with Treasury calculating in September 1981 that a "10 percent variation in aluminium prices will vary the return to the nation by \$144 million."³⁴

Naturally, rises were also important to the consortium. Aluminium smelting is an extremely capital-intensive industry. The consortium was required to secure financing for the best part of a billion New Zealand dollars in 1981 terms, in order to construct a manufacturing site that would not be fully operational and productive for five or six years hence. Matters were delicately balanced, and the success or failure of the operation would clearly come down to the price overseas customers were prepared to pay for the finished product.

Birch's theory about the likelihood of price rises received a rude jolt in 1981 when the aluminium market significantly crashed. By 1982, aluminium was trading at around half the price in real terms compared to 1980.³⁵

Nor was the crash restricted to a short term blip. Despite the plausibility of Birch's story about long-term gains, these did not come to pass. In retrospect the Aramoana smelter proposal came at a historic peak in the market. After the drop, prices subsequently went up and down but the general trend has been very disappointing. Even taking the nominal, "current dollars" value of aluminium, prices did not return consistently to the \$1,600 a tonne mark referred to by Birch until well into the 21st century. And naturally, when adjusted for inflation, the picture is far starker. The inflation-adjusted Annual Average Primary Aluminum Price has never since surpassed the point it hit in 1979.³⁶

The sharp correction in aluminium prices affected the entire global aluminium market. Aramoana was not the only project delayed or cancelled. For example, also in 1981 the aluminium giant Alcan cancelled a planned smelter at Bundaberg in Australia, similarly citing the weak market conditions.³⁷

All of this stands as compelling evidence that it was large scale economic factors that led to Alusuisse's withdrawal from the consortium. Furthermore, in retrospect it is clear that Alusuisse's withdrawal was tantamount to the end of any likelihood of the smelter proceeding, and so by extension all of this stands as compelling evidence that large scale economic factors led to the eventual overall collapse of the project.

Though Fletchers and the government talked extensively about stitching up a new deal with Pechiney, this seems to have been doomed to failure. Cabinet deliberations from 1982 make

it obvious that the two sides were much too far apart to make any agreement realistic. In public Birch retained an optimistic stance, but in secret the Cabinet appeared far more fatalistic, with minutes in April 1982 noting that "the current negotiations appeared to some members to be a charade that simply delayed a decision..."³⁸

The deal proposed by Pechiney was worse for New Zealand in every respect: they proposed to pay far less for the electricity provided by the government; unlike Alusuisse they proposed no "downstream" aluminium processing in New Zealand to improve the economic returns for the country; and they demanded even more electricity to meet their plans.³⁹ The energy was not available and could only have been met by very expensive thermal generation.⁴⁰

Treasury's advice to government regarding the earlier Alusuisse proposal was very tepid and gave only very reluctant and measured support, including noting in September 1981 that "a good case can be made for not proceeding with [the smelter]." ⁴¹ Even at the inception of the affair in 1980 before the Fletchers consortium were selected by the government, Treasury was highly disturbed by the marginal economic benefits of the entire scheme and almost recommended against offering the power surplus for aluminium smelting, but as Cabinet later noted, the officials "were mindful of the buoyancy of aluminium prices, which proved the decisive influence in persuading them not to recommend that the project be aborted."⁴²

Given the sharp relative deterioration in the Pechiney proposal compared to the (already dubious) Alusuisse proposal, it does not require expert economic analysis to say that the government could not responsibly have continued with the scheme with Pechiney - it was clearly not in the national interest. Though posturing from both sides continued for some time, it became clear through the middle period of 1982 that agreement was unrealistic and in October it was officially announced that negotiations would be paused for a year. When Cabinet returned to review the matter in late 1983 their distaste for a renewal of the project was now evident and they resolved to offer the consortium power supply at 2.9c per unit - a very significant increase on the consortium's conveyed bottom line a year earlier, and the end of any realistic prospect of a deal.⁴³

In sum, the economics of the Aramoana smelter were highly marginal both from the perspective of the government (on the hook for the extreme costs of providing infrastructure and generation to meet the electricity demands of the proposal) and the consortium (on the hook for the extreme costs of building the site and spinning up production). In this context it is easy to see why the change in fortunes of the aluminium market presents as a decisive factor in the collapse of the project.

Part Two: Evaluation and Reconsideration

So far I have outlined two plausible factors contributing to the demise of the smelter. The general flow of informed discussion has been to downplay the protests in favour of the economics. There is some basis for this: as I have noted, the evidence behind economic matters being pivotal is highly compelling.

Nonetheless, I submit that to focus entirely on bald economic matters, and to treat the protests as irrelevant, is an oversimplification of the situation in three respects.

First, the economic considerations are prone to overstatement, and when put into context it is by no means obvious that they should have led Alusuisse and then Pechiney to withdraw from the proposal. With careful analysis it becomes quite plausible that these withdrawals were also

influenced by a fundamental lack of confidence in New Zealand as a reliable and supportive venue for their business - and the Save Aramoana Campaign (directly and/or indirectly) clearly contributed to that lack of confidence.

Second, to speak of the economic considerations in isolation is misleading, because these considerations cannot be decoupled from questions of domestic policy in New Zealand. The economic calculations relied upon the price government was willing to accept to supply power, and that willingness was fundamentally tractable in the face of public protest.

Third, the economic analysis of the situation is too shortsighted: it can only hope to explain why one particular proposal for one particular industry, over the course of a few years at the dawn of the 1980s failed. But in spite of its exquisite potential as a site for heavy industry, Aramoana remains untouched 45 years later, and the best explanation for this lies in the influence of the protest movement.

In the following sections I will consider each of these three points in turn.

The Economics: A Closer Look

Consider again the large scale economic picture for the aluminium industry at the point when Alusuisse withdrew from the project. It is true, as already noted, that Alusuisse withdrew from other aluminium projects ostensibly in response to the price slump, and that other companies such as Alcan withdrew from planned developments around the same time. However, development did not cease. Pechiney, for example, continued work towards building three new smelters over this period, including one in Tomago, Australia, which was supplied with power at a similar cost to that offered to Alusuisse by the New Zealand government.⁴⁴

Following the withdrawal of Alusuisse, at least three rival companies showed interest in taking Alusuisse's place in the consortium, and correspondence from the time gives the appearance that these companies were jockeying for position. For example, at the end of 1981 the Vice-President of Kaiser Aluminium in the United States wrote to Fletchers laying out their perceived road map for a refresh of the proposal and the advantages their company could deliver. They further expressed willingness to spend "in the range of US 1.5 million" on initial steps in feasibility assessments, as well as declaring "we are very interested in pursuing this project. We believe the project has a number of excellent fundamentals..."⁴⁵

This is important because it shows that even in spite of Alusuisse's withdrawal, and in spite of continued weakening of aluminium prices in the subsequent months, the perception from other aluminium experts remained that the project was still worth pursuing and that the economics were likely to be sound.

It is worth noting here that relative to other major aluminium companies, Alusuisse was in a particularly financially weak position in this period. In an earlier generation Alusuisse had been the ascendant aluminium producer, but times were tough for them in the early 1980s, and they eventually dropped out of the so-called "big six" producers, before later being absorbed by rival Alcan. Between 1980 and 1986 the company massively contracted, shedding approximately 50% of their staff.⁴⁶ There is a plausible inference, then, that the decision of Alusuisse to withdraw from Aramoana was as much to do with localised company circumstances as it was to do with the objective merits of this particular project.

Furthermore, on its face, it is unclear why a temporary drop in prices would lead to the abandonment of what was clearly a long-term strategic development. In one sense it is irrelevant that aluminium prices dipped in 1981, because in 1981 the consortium didn't have any aluminium to sell. The proposed smelter was not projected to produce any aluminium until 1985 at the earliest. The most crucial matter for the economic viability of the smelter was not what aluminium prices were doing in 1981, but rather what they would be doing in 1985 and well beyond that time.

It is true, as I have already noted, that aluminium prices stayed substantially depressed, but the main players in 1981 did not *know* that that would be the case, and nor did they *expect* it to be the case. Bill Birch himself made this point throughout the aftermath of Alusuisse's withdrawal - that Aramoana would be coming on stream just in time to benefit from an expected uptick in prices (and he was to some extent correct - while not regaining the earlier peaks, prices rose significantly in real terms compared to the troughs of 1981 and 1982).

In that case it seems surprisingly fickle for Alusuisse and other aluminium producers to turn away from the development merely on the basis of what was, for all they knew, a short term blip. If Aramoana was a good long-term strategic investment in 1980, it remained so in 1981. Indeed, despite disappointing price trends, world production of aluminium has continued to increase. As I have described, there was a dip and cancellation of some projects following the 1981 slump, but in the longer term production has grown significantly - from 15 million tonnes per year in 1980, to 67 million tonnes per year in 2021.⁴⁷ For these reasons, economist Geoff Bertram is unconvinced by the claim that the price drop was the undoing of the Aramoana proposal: "Aluminium pricing is a cover story. Everyone in the industry knows it goes up and down like a bloody yoyo... Alusuisse didn't see Fletcher Challenge and the New Zealand government as reliable partners. Government can be voted out of office, and Fletcher Challenge don't have any grounding in the aluminium industry."⁴⁸

If Bertram is correct, and the withdrawal of Alusuisse was more to do with their overall lack of confidence in their prospective partners in New Zealand, then this again draws us back to the potential influence of the Save Aramoana Campaign. New Zealand holds general elections at least once every three years. Alusuisse were facing at least two, and more likely three, possible junctures in which the government could change before their investment could even begin production and attempt to repay itself. In a country with stable bipartisan and popular support for the intended development programme this might not be such a problem. But in a country where protesters have mobilised popular support across the country, and where the opposition parties are showing strong hints of growing disapproval, it is clear why confidence may be undermined.

This potential influence on Alusuisse's decision-making in 1981 becomes more compelling still in the case of Pechiney's decision-making in 1982. Two things in the political climate had changed by this stage.

First, while the November 1981 election had returned National to power, as Muldoon himself was later to acknowledge, the government was in a severely weakened state with "an effective majority of one," and burdened by a widespread perception that they were unlikely to be re-elected (a perception vindicated by the subsequent Labour landslide in 1984).⁴⁹

Second, by late 1982 the stance of the Labour government-in-waiting had further hardened, if not into outright opposition, then into ominous threats of renegotiation of the fundamentals of

the power supply agreement, and damn the consequences. For example, on the eve of the final round of talks with Pechiney, when Labour energy spokesperson David Caygill was pressed by reporters as to whether Labour's vocal scepticism could have a deleterious effect on Pechiney's commitment to the project, he replied: "Well frankly, if Pechiney are about to sign an agreement with the government that provides for them to get cheap power at the expense of the rest of New Zealanders, then I believe we'd have done a public service if we did frighten them away from that sort of proposition."⁵⁰

Caygill further suggested that 5.8c per KWh would be an appropriate price for the power - a figure literally twice that offered to Pechiney by the government, and unrealistic as a starting point for serious negotiation.

Following the ensuing collapse of the talks Fletchers and government representatives were keen to attribute the collapse to global economic factors rather than Labour opposition - but nonetheless remarks such as those by Caygill must surely have been a source of concern to Pechiney.⁵¹ Pechiney were pursuing negotiations throughout a difficult economic period, and what is more, they were doing so with a wounded government limping along, and with a presumed-government-in-waiting heckling from the sidelines about their intention to sabotage the deal at the first opportunity with a manifestly unworkable power price.

The cumulative effect of all this is strongly to suggest that the aluminium price was not the only decisive influence on decision-making by the overseas partners in the consortium. Instead, it is likely that aluminium companies were also substantially influenced by their perception of New Zealand as an unreliable site for long-term investment, with inherent unpredictability regarding the pre-conditions for building the smelter.

If that was their perception, then it is precisely the perception the Save Aramoana Campaign and their affiliates worked to build. They lobbied Labour and raised the issue to a position of national prominence whence it could not be ignored. In this light a focus exclusively on the economic considerations is misleading, because it is likely that the overall favourability of public and political opinion (and hence the reliability of investment in New Zealand) was also factored-in to decision making by Alusuisse and Pechiney.

The Power Price

Like other industries, the economics of aluminium production depends on an equation with two sides: the price it costs to produce it, and the price for which it can be sold. To treat the failure of the Aramoana proposal as being attributable solely to the global price of aluminium is to ignore the first of the two operands in this equation.

From the perspective of the consortium, the single most critical constituent of the overall cost of production was the power supply agreement with the New Zealand government. The fundamentals of the smelter proposition may have been questionable for Alusuisse and Pechiney, especially after the jitters caused by the 1981 price slump, but their outlook would have been much brighter if the government had offered a lower price per kilowatt hour for the electricity they required.

Clearly, protest action can have had no appreciable influence on the global price of aluminium, but it is likely that the existence of a concerted campaign against the smelter was influential on the stance of the New Zealand government during the power price negotiations.

In reflecting retrospectively on the protest activity, Hugh Fletcher noted: "At the end of the day I didn't really worry about the protesters because where were they going to go? Unless they can change Muldoon's mind, they're not going anywhere. I had the decision maker on my side."⁵² Fletcher's comment seems precisely correct. It would be a massive exaggeration to imagine the protest campaign changing Muldoon's mind to the extent that he would reverse his support for the smelter, but on the other hand it is very plausible to imagine that they could influence Muldoon on the degree of power price concessions by demonstrating the political inexpedience of giving too much away to the consortium.

Muldoon's National Party had sensitive recent memories about the pratfalls of being on the wrong side of an environmental campaign. The Save Manapouri Campaign was in many respects a forerunner for the Save Aramoana Campaign, and there are many clear parallels between the two movements. The Save Manapouri Campaign of the 1960s and early 1970s centred on the question of whether (and how far) Lake Manapouri should be raised in order to increase the energy potential available from the power station built to provide electricity to the aluminium smelter at Tiwai Point and was a significant thorn in the side of the National Party government of Keith Holyoake and then Jack Marshall. After some twists and turns the issue reached a head in 1972 when it was widely accepted that it contributed to the landslide Labour victory that ejected National (including Muldoon, who was by this stage Deputy Prime Minister). As Neville Peat puts it, "National was portrayed as a stick-in-the-mud threat to all the big lakes; Labour as something of a saviour.... National lost votes throughout the country on account of Manapouri."⁵³

Despite Muldoon's bland assertion in *Rise and Fall of a Young Turk* that he himself was a conservationist, environmental issues were a vulnerable point in National's reputation with the electorate, and this point cannot have been lost on Cabinet when they came to negotiate over a power price.⁵⁴ On the one hand the smelter could benefit National because creating jobs and industries is a vote winner, but on the other hand New Zealanders had shown their distaste for sacrificing the environment in order to create value for overseas interests. Going too low on the power price would expose the government to the potential for backlash.

For these reasons, a great deal of work by the Save Aramoana Campaign and their affiliates aimed at creating publicity around the matter of the power price. In particular, the sister organisation Campaign Power Poll worked to elevate the mundane and ostensibly technical questions of power-price supply and electricity generation to matters of public concern, for example with pamphlets distributed to 180,000 households headed "Would you prefer cheaper electricity or a new smelter?"⁵⁵

Cabinet papers from this time dance somewhat delicately around the necessity of public justifiability of the power price. For example, they refer euphemistically to the "presentational problems" posed by a low power price. Nonetheless at points there is direct evidence that Cabinet were sensitive to their public vulnerability on this point.

In October 1980 the Cabinet Economic Committee noted "the probability that journalists would discover that the government had approved the proposal despite the fact that its economics, from a national point of view, were marginal."⁵⁶

In May 1981, at a crucial stage of discussions over the power price, the government's own negotiating party of public servants recommended giving further way to the consortium's bargaining requests. The Cabinet Economic Committee rejected this recommendation and

their reasoning was telling of the concerns created by the public debate the Save Aramoana Campaign had fostered: "A further reduction in the power price from 1.6c/KWh to 1.45c/KWh would simply rekindle the public debate on the entire power price question... If [the consortium] were not already aware of it, they should be made to appreciate the importance of the base power price for public acceptance of the project."⁵⁷

Naturally, the public-facing stance of the government was that they would not reduce the power price to a point where it ceased to make sound economic sense for New Zealand. On the other hand, such prudence never seemed to stop them before. New Zealand's existing smelter at Tiwai Point is an instructive case in point.

Tiwai Point was set up on a sweetheart electricity deal and in 1980 when the government was refusing to budge from 1.6c per KWh to 1.45c per KWh for the Aramoana smelter, further south at Tiwai Point Comalco was reported to be paying 0.7c per KWh for their electricity.⁵⁸ Tiwai Point continues at the time of writing to enjoy heavily subsidised power. While the latest deal is confidential, it has been regularly reported by the New Zealand media as being in the range of 3.5c per KWh in 2021 terms – or around a sixth of that paid by household consumers of electricity.⁵⁹ The point is, it was hardly inconceivable or without precedent that the government would give way and allow a sharper price to the consortium, even if such a price was financially dubious from the nation's perspective.

In different times or different places it is perfectly possible that the authorities could have offered further subsidisation to the electricity price, and the smelter would have gone ahead. Pechiney eventually proceeded with building in Quebec, after successfully wheedling greater subsidisation on the electricity out of Canadian authorities than the New Zealand government was willing to offer.⁶⁰

Let us regather and reemphasise this point. To understand why Alusuisse and Pechiney deemed Aramoana to be uneconomic, one needs to understand not just the circumstances around the global price of aluminium, but also the state of negotiations around power pricing. The evidence indicates that protest action and publicity contributed to the New Zealand government's refusal to meet the pricing requirements of the consortium, and that such actions thus contributed (albeit indirectly) to the demise of the project.

Aramoana After 1982

Almost everyone agrees that Aramoana has excellent advantages as a site for a heavy industry. There is a large space of (mostly) unoccupied flat land, it is adjacent to sheltered deep water where docking facilities can be built, and it is in good proximity to major port facilities in Port Chalmers and a stable labour pool in Dunedin. Various initiatives were considered for Aramoana before aluminium, including, for example, an oil refinery in 1959.⁶¹ In late 1982 Hugh Fletcher reflected on these points, noting that "Aramoana [is] an excellent site for the location of a major industry... regardless of the outcome of the present proposal to build a smelter at Aramoana, I think it is fair to say that the question of industrial development at Aramoana is by no means dead."⁶²

So even if one gives the answer that economic factors led to the collapse of the smelter project, there is a sense in which that answer is too narrow and neglects a more important question: it doesn't explain why Aramoana remains to this day a relatively undisturbed environmental taonga. To answer that question we need to consider what happened after 1982.

Despite seeing off the consortium, and seeing government abandonment of any plans for a smelter, the Save Aramoana Campaign did not disband. Nor did Māori at Ōtākou or the residents in the Aramoana League let up in their efforts. They stuck around for a final chapter in the campaign. In brief terms there were two important developments.

First, in 1983, the Planning Tribunal heard an appeal from a variety of protest groups (including the Ōtākou Māori Committee, the Aramoana League, and the Save Aramoana Campaign) on the decision of the local council to zone Aramoana as "Industrial" in the district scheme. The matter of zoning is crucial because it served to permit or prohibit various types of activity taking place at Aramoana. The protest groups energetically contested the zoning and eventually won their case leading to the rezoning of the area. The majority opinion of the Planning Tribunal, authored by Judge Peter Skelton, noted: "We are unable to agree with those who assert that industrial development should take priority over other values at Aramoana."⁶³

This was a significant impediment to any possible industrial development at Aramoana, but did not close the door entirely, with Skelton remarking "it does not follow that some form of industrial development is forever and a day precluded from the appeal area."⁶⁴

Second, after the disestablishment of the Otago Harbour Board in 1990 (in whom the key lands at Aramoana were vested), and after extensive continued lobbying by the Save Aramoana Campaign throughout the 1980s (including following the change of Government which ousted Muldoon and the Think Big paradigm), the majority of land at Aramoana was vested in the Department of Conservation, who then declared it to be a reserve.

With this goal achieved, in April 1990 the Save Aramoana Campaign agreed to wind up and in their final actions voted to spend a portion of the remaining funds to erect a bronze plaque at Aramoana commemorating the efforts of the previous decade.⁶⁵

The land at Aramoana was valuable in terms of cold hard money, and could have been used as a means to any number of profitable ends, and yet, chiefly because of the protest movement, the new Labour government was prevailed upon to grant it an enduring legal protection from such purposes. This was a point acknowledged at the time, with Associate Minister for the Environment Peter Dunne announcing in April 1990 that Aramoana had been "rescued from the smelter of Think Big" because "the public had managed to stop it." Labour Party candidate Pete Hodgson expanded on Dunne's sentiments, saying that "Today's decision [to vest Aramoana with the Department of Conservation] is the last step in a story of how a community took on the government and won."⁶⁶ In other words, it took public pressure to overcome the profit imperative and that pressure was focused and sustained by the Save Aramoana Campaign and other protest groups.

Conclusion

Merely seven months after Dunne's announcement that the protection of Aramoana was guaranteed, in November 1990 there was a terrible massacre at Aramoana. Among the fourteen dead were several who had joined the campaign. Garry Holden, in particular, was a key protester and litigant.

The scale of the tragedy at Aramoana (which, until the Christchurch mosque shootings, was New Zealand's worst mass shooting) has cast a very long shadow and has overtaken Aramoana's associations in the national consciousness. The campaign against the smelter

showcased Aramoana in the national spotlight as an environmental and cultural taonga, but the tragedy has made it a place to be talked about in sombre tones, with what Gregory O'Brien calls "an even darker resonance."⁶⁷

It is likely that this darker resonance goes some way to explaining the intervening neglect of one of New Zealand's most engaging environmental controversies. I hope that this article can contribute a small counterbalance to those tragic memories by refocusing on what is ultimately a more positive aspect of the area's history.

The Aramoana smelter proposal failed for a number of reasons, including high-level economic factors. Undoubtedly, the drop in the global price of aluminium was a significant factor in the unravelling of the proposal. But the perception that this was the only decisive factor, or that the protest activity was irrelevant, is not justified by the evidence.

I have argued that when looked at in context and with care, the evidence points to the importance of the protest movement in several key respects: influencing the Labour opposition to take an oppositional stance towards the smelter, undermining the confidence of overseas partners in New Zealand as a site for long-term investment, pressuring the government not to give way on the matter of the power price, winning in the courts to stymie short-term smelter plans, and finally prevailing on the new government to have the area declared a reserve, thus securing the long-term future of the area.

¹ C. G. Cable, *et al.*, *The Proposed Aluminium Smelter At Aramoana: Some Issues and Implications*, Occasional Paper No. 12, Joint Centre for Environmental Sciences, University of Canterbury and Lincoln College, 1981, 1.

² Cabinet papers: CS (81) 396 "The National Development Order 1981", 4.

³ Paul van Moeseke, *Aluminium Smelting in New Zealand: an Economic Appraisal (with Addendum)*. (Economics Discussion Papers, no. 8008. University of Otago, 1980), 3.

⁴ Radio New Zealand, *Morning Report*, 12.10.1982. Transcript in Fletcher Trust Archive, accession number 0141/24.

⁵ An exception to this neglect is a forthcoming essay concerning colonialism and indigenous environmental activism and the art of the Aramoana protest movement by Jacob Edmond. Jacob Edmond, "Current Affairs: Indigenous Cartography and Colonial Environmentalism," chap. 5 of *World Muse: News Media, Spatial Form, Global Imagining* (unpublished manuscript, under contract with Columbia University Press).

⁶ Patricia Sarr and Keith Johnston, "Open Letter", 2.10.1981. Copy in author's collection.

⁷ Barry Downey, speaking on Radio New Zealand *Morning Report*, 22.10.1982. Transcript in Fletcher Trust Archive, accession number 0141/24.

⁸ Vincent O'Sullivan, *The Dark is Light Enough: Ralph Hotere A Biographical Portrait*. (Penguin, 2020), 254-256.

⁹ Hugh Fletcher interview with Tosh Stewart, 19.2.2025; Sir Bill Birch interview with Tosh Stewart, 18.2.2025.

¹⁰ Geoffrey Bertram Interview with Tosh Stewart, 20.11.2024.

¹¹ Brad Tattersfield, *Bill Birch: Minister of Everything* (Mary Egan Publishing, 2020), 96.

¹² The shadiness consisted chiefly in first, the conspicuous speed with which the bill became law; second, an abbreviated public submissions process; and third, evidence of unacknowledged private sector influence in the specifics of the eventual draft legislation. These matters are canvassed at length through Andrew Dorrington Boyle, *The National Development Act 1979: A Critical Analysis* (MA thesis, Massey University, 1986). See also the analysis in Roger Wilson, *From Manapouri to Aramoana: The Battle For New Zealand's Environment* (Earthworks Press, 1982), 74-81.

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- ¹³ Bruce Jesson, *The Fletcher Challenge* (The author, 1980), 58.
- ¹⁴ Otago Council, undated booklet c1980. *Aramoana: the pre-eminently suitable site for locating an export orientated energy intensive industry*. In *Save Aramoana Campaign Records*. Hocken Archives, accession number 00-050, Box 2.
- ¹⁵ “Why can’t the information be available?”, *The Star* (Christchurch), 24.2.1980. Copy in *Save Aramoana Campaign Records*. Hocken Archives, accession number 86-005, Box 5.
- ¹⁶ T. R. Partridge and J. B. Wilson, “Plant Communities at Aramoana”, in A.G. Fricker (ed.) *The Ecology of Aramoana: Otago Harbour* (Dunedin Metropolitan Regional Planning Authority, 1975).
- ¹⁷ Audio recording of Haare Williams’ interview with Makarini [Magda] Walscott, and Maarire [Murray] Goodall on *He Rerenga Kōrero*. Copy in Ngā Taonga Sound and Vision, accession number 47382.
- ¹⁸ The public relations specialists engaged by the consortium surreptitiously observed the travelling embassy and reported on the metal composition of the caravan with some amusement. Letter from Rob Fenwick to Joseph Peart, 24.3.1981. Copy in Fletcher Trust Archive, accession number 0141/27.
- ¹⁹ Angela Baker Interview with Tosh Stewart, 21.10.2024; Allan Cumming interview with Tosh Stewart, 18.9.2024.
- ²⁰ Notes from meeting with Police, 7.1.1981. In *Save Aramoana Campaign Records*. Hocken Archives, accession number 00-050, Box 2.
- ²¹ Richard Thomson interview on Radio New Zealand. *Checkpoint*. 30.4.1981. Transcript in Fletcher Trust Archive, accession number 0141/24.
- ²² *Otago Daily Times* 26.8.1981; a more detailed account of the early legal challenges from the perspective of co-litigant the Environmental Defence Society can be found in Raewyn Peart, *Environmental Defenders: Fighting for our natural world* (David Bateman, 2024), Chapter 3.
- ²³ Quoted in Tattersfield, *Bill Birch*, p114.
- ²⁴ Allan Fenwick Ltd. “Government Relations Issues Affecting the Construction of the South Pacific Aluminium Smelter”. 1981, 7. Fletcher Trust Archive, Accession number 0428/2.
- ²⁵ South Pacific Aluminium Ltd. *A Smelter for Aramoana*. 1981.
- ²⁶ Paul Goldsmith, *Fletchers: A Centennial History of Fletcher Building* (David Ling, 2009), 181; “Smelter Policy ‘Not Changed’”, *Otago Daily Times*, 30.5.1981, in *Aramoana: clippings from Dunedin newspapers 1981*, Volume 2. McNab New Zealand Collection, Dunedin Public Library, 197.
- ²⁷ “Smelter unlikely under Labour”, *Otago Daily Times*, 7.11.1981, in *Aramoana: clippings from Dunedin newspapers 1981*, Volume 2. McNab New Zealand Collection, Dunedin Public Library, 361.
- ²⁸ Allan Cumming Interview with Tosh Stewart, 18.9.2024.
- ²⁹ Gregor Morgan Interview with Tosh Stewart, 18.11.2024. One challenge in investigating the success of these actions is that Alusuisse were subsequently acquired by a larger rival, Alcan, who were themselves subsequently acquired by an even larger rival, Rio Tinto. The Rio Tinto Archive is unable to produce any detailed records relating to Alusuisse's Australian operations in this period. Email from Rio Tinto Archive staff at the University of Melbourne to Tosh Stewart dated 8.10.2024
- ³⁰ Alusuisse. *Company Report 1980*. 6
- ³¹ Alusuisse. *Company Report 1981*. 6.
- ³² Speech in Dunedin by Sir Bill Birch on 7.10.1980 – transcript in *Save Aramoana Campaign Records*. Hocken Archives, accession number 86-005, Box 4.
- ³³ Cabinet papers: E (81) 154 “Major Projects”, p6; E (81) 156 “Aramoana Aluminium Smelter”.
- ³⁴ Cabinet papers: E (81) 156 “Aramoana Aluminium Smelter”.
- ³⁵ United States Geological Survey. “Aluminium Statistics”. Last modification 5.7.2023. A copy is available at <https://www.usgs.gov/media/files/aluminum-historical-statistics-data-series-140>. An alternative data source converging with these findings is the London Metal Exchange. Discussion of these pricing trends in the London Metal Exchange can be found in James F. King, *The aluminium industry* (Woodhead Publishing, 2001), 54-55.
- ³⁶ United States Geological Survey. “Aluminium Statistics”. Last modification 5.7.2023. A copy is available at <https://www.usgs.gov/media/files/aluminum-historical-statistics-data-series-140>.
- ³⁷ Alcan. *Company Report 1981*. 5.
- ³⁸ Cabinet papers: CM 82/12/3
- ³⁹ Cabinet papers: CM 82/12/3 “Second Aluminium Smelter”.
- ⁴⁰ Cabinet papers: E (81) M 35 Part 1.

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- ⁴¹ Cabinet papers: E (81) 154 "Major Projects".
- ⁴² Cabinet papers: E (81) M 35 Part I "Aramoana Aluminium Smelter".
- ⁴³ Cabinet papers: E (83) 128 "Review of Aramoana Smelter Proposal".
- ⁴⁴ Philippe Mioche, "Australia, a newcomer in aluminium 1955-1985". *Entreprises et histoire*, Vol 4, No. 89 (2017), 46.
- ⁴⁵ Letter from Hutchcraft to Downey, 18.12.1981, Fletcher Trust Archive, accession number 0243/9.
- ⁴⁶ Adrian Knoepfli and Bruno Boehm, "Alusuisse : de l'euphorie des années 1970 à la perte d'autonomie/ Alusuisse: From the Buoyancy of the 1970s to the Loss of Autonomy." *Cahiers d'histoire de l'aluminium*, no. 46-47 (December 2011), 100.
- ⁴⁷ United States Geological Survey. "Aluminium Statistics". Last modification 5.7.2023. A copy is available at <https://www.usgs.gov/media/files/aluminum-historical-statistics-data-series-140>.
- ⁴⁸ Geoffrey Bertram Interview with Tosh Stewart, 20.11.2024. Bertram's comments about Alusuisse's confidence in Fletchers also have an echo in remarks made by economist (and former Tiwai Point director) Kerry McDonald: "Fletchers in my view took too much for granted. Fletchers typically had an attitude that 'we understand New Zealand; we are New Zealand, so we don't need to do all that other stuff'... They were using low calibre weapons with low grade ammunition." Kerry McDonald interview with Tosh Stewart, 25.10.2024.
- ⁴⁹ Robert Muldoon, *Number 38* (Reed Methuen, 1986), 1.
- ⁵⁰ David Caygill interview on *Morning Report*, 14.10.1982. Transcript in Fletcher Trust Archive, accession number 0141/24.
- ⁵¹ For an example of downplaying this influence on Pechiney, see Barry Downey interview on *Morning Report*, 22.10.1982. Transcript in Fletcher Trust Archive, accession number 0141/24.
- ⁵² Hugh Fletcher interview with Tosh Stewart, 19.2.2025.
- ⁵³ Neville Peat, *Manapouri Saved!: New Zealand's First Great Conservation Success Story* (Longacre Press, 1994), 69.
- ⁵⁴ Robert Muldoon, *The Rise and Fall of a Young Turk*. (A.H. and A.W. Reed, 1974), 102.
- ⁵⁵ "Cheaper Power Box-Drop", *The Press*, 20.9.1980, 25, <https://paperspast.natlib.govt.nz/newspapers/CHP19800920.2.144>
- ⁵⁶ Cabinet papers: E (80) M 37 Part I.
- ⁵⁷ Cabinet papers: E, (81) M 15 Part IV.
- ⁵⁸ "Study Finds Smelter Against N.Z. Interests", *Otago Daily Times*, 8.4.1980, in Aramoana: clippings from Dunedin newspapers 1952-1980, Volume 1. McNab New Zealand Collection, Dunedin Public Library, 212.
- ⁵⁹ See for example Bernard Hickey, "How one back-room power deal cost you up to \$200 a year". *The Spinoff*, 29.10.2021, <https://thespinoff.co.nz/business/29-10-2021/bernard-hickey-how-one-back-room-power-deal-cost-you-up-to-200-a-year>.
- ⁶⁰ Cabinet understood the Canadian power price offer to be in the region of 0.6c per KWh. Cabinet Papers, E (83) 128, 4.11.1983 "Review of Aramoana Smelter Proposal", p4.
- ⁶¹ "Oil Refinery May Be At Aramoana: Prospects Bright", *Otago Daily Times*, 11.6.1959, copy in Archives New Zealand, accession number R6788469.
- ⁶² Draft letter from Fletcher to Johnston, 4.11.1982, Fletcher Trust Archive, accession number 0141/26.
- ⁶³ *Planning Tribunal Decision No. C51/83: Otago Harbour Board et al vs Silverpeaks County Council*. 1983, 48.
- ⁶⁴ *Planning Tribunal Decision No. C51/83*, 48.
- ⁶⁵ Save Aramoana Campaign minutes 23.4.1990. Archives New Zealand, accession number R2353848.
- ⁶⁶ "Aramoana industry spectre removed", *Otago Daily Times*, 6.4.1990, in Aramoana: clippings from Dunedin newspapers 1988-1993, Volume 4. McNab New Zealand Collection, Dunedin Public Library, 27. To be precise, the reserve status given to Aramoana was that of an "ecological area" under the Conservation Act 1987.
- ⁶⁷ Gregory O'Brien, *Hotere: Out The Black Window* (Godwit, 1997), 95.