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## **GLOBAL MARKET AND NATIONAL TASKS; THE ROLE OF ALUMINIUM IN NORWEGIAN ECONOMY SINCE 1945**

All analyses of Norwegian aluminium industry should take two basic facts as the starting point. Firstly, her abundant supply of hydro power in proximity of good harbour facilities makes Norway well suited for large scale smelting, which is an extremely energy consuming process. Secondly, any large scale smelting industry in Norway has to be export oriented. Domestic consumption of aluminium can never match the potential for smelting. Aluminium may be exported either as primary metal in ingots etc, in semi-fabricated goods as e.g. rolled products or in the shape of finished goods.

The aim of this paper is to outline the political and economic role assigned to the aluminium industry of Norway since 1945. An apt approach for showing changing political attitudes is to focus on the question of fabricating, and especially the relative position of fabricating and primary produce. Further processing from the stage of primary metal obviously will offer employment opportunities and create value added. Thus one should think Norwegian politicians always would favour fabricating and further processing in Norway. This has not been the case. The line of argument in this paper is that for a prolonged period, fabricating was relatively low on the list of priorities for key decision-makers in the political apparatus. We will demonstrate this by focusing on the development of state-owned Årdal og Sunndal Verk (ÅSV), for a long time the major Norwegian aluminium company. By examining the strategies adopted by this company, in interplay especially with the Ministry of Industry, we shed light on the governance of a state owned company competing in a global market, and demonstrate how ÅSV was used as a political tool in differing contexts.

I argue that aluminium has been a highly politicised metal in Norway after 1945; aluminium has been used in order to achieve certain domestic political and economic goals. During the first few years, a cautious policy of modest expansion, insisting on securing domestic vertically integrated chains of production prevailed. It was believed aluminium was primarily a military metal which would not face much civilian demand. Within a few years this worry was blown away and Norway set out to become a major supplier of ingots. This was a political decision, designed to generate export revenue. This logic dominated until the 1970s, albeit the question of fabricating had a brief spell of interest when Norway seemed to be heading for membership in a large European common market in the early 1960s. The fundamental reason for the change of policy in the 1970s was a new perception of the value of energy. There would be allocated only very little new energy to smelting. This gave rise to the period of consolidation in Norwegian aluminium industry, lasting to the present day.

Consolidation was given an initial twist of domestic fabricating and attempts at securing domestically integrated chains of production for reasons of domestic politics. It was perceived that Norway had an unprecedented room of manoeuvre for controlled restructuring in traditional industry in anticipation of large revenues from petroleum activities in the North Sea. As the strategy of domestic fabrication proved to be no commercial success, the strategy was changed during the first half of the 1980s. The remedy now came to be integrating into fabricating abroad. During the latter process of reorienting, Norwegian politicians dismantled ÅSV, a tool which had served well during the period of ingot's primacy. Now the chosen tool for consolidating Norwegian aluminium industry became Norsk Hydro, another company where the Kingdom of Norway was the majority share owner. Today, Hydro's position represents a potential political problem, as there are signs of the company becoming primarily a global actor, whose decisions chiefly depend on business merit. Utilising Norwegian resources may thus become a question of lesser importance, but utilising such resources in a matter consonant with Norwegian national interests is precisely the rationale for heavy state involvement in the company.

### The initial period of caution

During the German occupation Norway was assigned the role as the aluminium smelter for the German Grossraumwirtschaft. Grandiose plans were laid, but failed. For all the time and effort, only one smelting plant at Årdal came near to be complete by 1945. As all German assets were confiscated by the state as enemy property, the Labour government was presented with an opportunity to establish a state owned aluminium company. Now, actually completing what the Germans had left was no obvious thing. It was only the facts on the ground that made aluminium an option; it was considered a pity not to make the most of the capital already invested. Even this failed to convince some key politicians. Minister of Finances, Erik Brofoss, dissented when the bill establishing a state aluminium company was sent to Parliament in June 1946.<sup>1</sup> Aluminium would have to be an export commodity, and he saw no way of Norway competing with the aluminium industry of North America, which had been greatly expanded during the war. He was not the only member of government hesitant on aluminium in this period. After Parliament had decided on completing Årdal, an international joint venture expressed interest in developing a large scale smelter in Glomfjord in the north of Norway. Minister of Industry, Lars Evensen, told Parliament one should take care not to establish more capacity in industries where there already was sufficient coverage of the domestic demand.<sup>2</sup> Thus, there was no enthusiasm for large-scale exploitation of the comparative advantage for producing aluminium for export.

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<sup>1</sup> Stortingsproposisjon (St.prp) [Parliamentary bill] nr. 69 (1945-46), in series *Stortingsforhandlinger* (SF) [Official report of the proceedings of Parliament]

<sup>2</sup> Stortingstidende (St.tid) [Verbatim parliamentary proceedings, in SF] 1946: 2062

When the Bill establishing Årdal Verk passed Parliament, the sub-committee for industry was rather enthusiastic. However, the majority encouraging the undertaking spoke strongly in favour of establishing a vertically integrated aluminium industry in Norway. Reviewing the debate in Parliament, there is no question a majority thought one now was about to establish both alumina refining, smelting and fabricating under state auspices.<sup>3</sup> The actual bill passed, however, did nothing more than establish a state-owned company for utilising the German leftovers. This left the new company and the Ministry of Industry with a large room for manoeuvre.

There were signs of aluminium moving up in priority within the Norwegian political apparatus during 1947. In Norway's first national budget, submitted to Parliament in February 1947, one strongly underlined that Norway faced a fundamental problem in the balance of payment. Currency pouring out of the country in order to pay for means of production needed for restructuring the economy dug deep in the currency reserves amassed by the merchant fleet during the war. This now warranted prioritising export industries in years to come.<sup>4</sup> Aluminium was mentioned as one of several suitable products benefiting from Norway's abundant supply of hydro power.<sup>5</sup> On the other hand, it was still a priority to increase export of products yielding high value added.<sup>6</sup> Thus it would be better to export primary aluminium than to export power, yet better still to export fabricated products.

Regarding aluminium, Norwegian politicians in this period feared competition from North America, but the North Americans themselves were rather enthusiastic about the future potential of this metal. In the early days of 1948 Deputy Minister of Industry, Arne Drogseth, was approached by the Canadian giant Alcan<sup>7</sup>, who wanted to expand in large scale smelting in Norway. Alcan now was willing to involve the Norwegian state in the project. Drogseth dragged his feet. Rather than discussing large scale smelting, he was interested in making alumina and getting into fabricating in conjunction with Alcan. This was of no interest to Alcan, who wanted to expand smelting in Norway to feed its fabricating works in Great Britain and elsewhere in Europe. Drogseth, on the other hand, found this part of the plan to be contrary to Norwegian interests. The value added would be little in relation to the vast amount of energy one would have to allocate to smelting. When Drogseth informed his superior, the one redeeming aspect of the plan was the possibility of creating a currency-earning plant with the help of foreign capital. The Minister of Industry still cared little for aluminium. He was

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<sup>3</sup> The committee's view: Inst. S. [Report on ways and means by a select committee, in SF] nr. 142 (1946), the debate: St.tid 1946: 1387-1412

<sup>4</sup> Stortingsmelding (St.meld.) [White paper, in SF] 10 (1947): 16

<sup>5</sup> St.meld. 10 (1947): 31

<sup>6</sup> St.meld. 10 (1947): 21

<sup>7</sup> For sake of convenience, I have referred to Alcan throughout this paper, although this name was not adopted until the 1960s.

more interested in getting the state owned iron works in Mo i Rana and the iron mines of Syd-Varanger going.<sup>8</sup>

Despite this lukewarm reception, Drogseth was allowed to continue his talks with Alcan. During the negotiations of 1948, Norwegian fabricating was a recurrent theme. Alcan had no interest at all in participating in such a scheme, and was solely interested in smelting. The interesting point of this obviously is the Norwegian hesitation in expanding large scale smelting, combined with the insistence on securing domestic vertically integrated chains of production. But, during 1948 this position changed. In working out the Norwegian Long Term Programme for OEEC, submitted to Parliament in the closing stages of the Alcan-negotiations, Norway again was assigned the role as a major aluminium producer for Europe; this time by Norwegian planners. A swift expansion in hydro power, paving the way for an equally expanded aluminium industry would be a contribution to curbing the European dollar-gap. The programme envisioned an increase in Norwegian production of primary aluminium from 30 000 tons in 1948 to 95 000 tons by 1952-53.<sup>9</sup> There was no mentioning of Norwegian fabricating in the programme, and the cautious approach to aluminium now was about to be thrown over board. On the other hand, expanding in primary aluminium was not to be left to foreigners; neither alone nor in conjunction with private Norwegian capital.

For various reasons the proposed joint Norwegian-Alcan smelter with government involvement of 1948 never materialised. In the spring of 1949 a proposed Alcan-Norwegian private enterprise setting up a smelter was labelled indigestible to the Labour-government, who favoured an expansion of the state company now entering business at Årdal. At this point the board of Årdal Verk dragged its feet, and wanted to await the market situation for six months before committing to building another smelter, which in a few years time would quadruple the amount of metal the company produced. Drogseth was impatient; a few months more or less would not produce certainty on the future market conditions. Alcan was eager to get into the proposed smelter, this should be sufficient proof of the market, Drogseth thought. At this point Drogseth too had abandoned the insistence on fabricating and spoke only of Europe's demand for ingots.<sup>10</sup> Norwegian fabricating now simply was not an issue for the key politicians.

This change of heart probably can be attributed to a combination of external pressure and internal rethinking. The initial optimism regarding Norway's ability to choose her own path of reconstruction was shattered in 1947, when one suddenly realised that Norway had a

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<sup>8</sup> For this paragraph: Arne Drogseth's notes "Konferanse 7/1 1948 vedr. Aluminium Union Ltd", 14.1.48; "Konferanse 23. februar 1948 med Mr. Bartholemew om eventuell utvidelse av Aluminium Union's produksjon i Norge", 26.2.48 and "Om spørsmålet om et nytt aluminiumverk i samarbeid med Aluminium Ltd", 9.4.48, all in, Riksarkivet (RA) [The National Archives], Oslo, Arkiv 1411, series Ea, Minister of Industry Lars Evensen's archive (LEA), box 15

<sup>9</sup> Memorandum om et norsk langtidspogram, Annex to St. meld. 54 (1948): 20-24

<sup>10</sup> Arne Drogseth's note "Aluminiumverk på Sunndalsøra", 12.5.49, RA, arkiv 1411, series Ec, Deputy Minister of Industry Arne Drogseth's archive (ADA), box 19

major currency problem. The more the politicians came to face this fundamental problem, the less hesitant they became to large scale aluminium industry in Norway, which obviously would be a major currency-earner. Furthermore, as aluminium was given the task of a currency-earner, the question of fabricating would have to be less pressing. The only reason aluminium was an option in Norway was the hydro power. Thus, the logic solution was first to expand smelting. In due course, one might hope for further processing.

As to the external pressure; as Norway accepted participation in the European Recovery Programme and joined the OEEC, she had to honour the logic of making the most of comparative advantages. Producing aluminium for export was in line with this thinking, establishing an iron works for the domestic market was not. Iron could be produced more efficiently elsewhere in Europe. This argument failed to convince Norwegian politicians and public opinion, as making Norwegian iron was considered a very important national task. In the spring of 1949 Drogseth was faced with growing opposition against the iron works from the USA, who favoured switching from iron to aluminium at Mo i Rana. Thus he explicitly suggested to his superiors that committing to aluminium at Sunndalsøra would take the sting out of the US' pressure on the iron works.<sup>11</sup> The government duly committed.

Committing to aluminium at Sunndalsøra was one thing. Actually setting up the smelter was another matter. The government was loath to let Alcan share in the spoils, but failed to raise sufficient capital in negotiations within the OEEC. Ideas of establishing a private enterprise constructing the smelter involving Alcan as well as Swedish and Danish fabricators were dismissed by Drogseth as late as December 1949<sup>12</sup>, as the government obviously was bent on making the state company the tool of exploiting Norwegian hydro power. This instance could have backfired. Only activism on the part of the Economic Cooperation Administration (ECA) in the wake of the outbreak of the Korean War finally catered for a bilateral agreement between the USA and Norway financing the smelter at Sunndalsøra.<sup>13</sup> Thus USA came to finance a state-owned smelter, a fact that never seemed to bother ECA. On the other hand, it would have been a hopeless task to convince ECA to help develop fabricating in Norway, as ECA adhered to the logic of utilising comparative advantages.

### The period of ingot's primacy

From what is said thus far, we can conclude that becoming a major supplier of aluminium ingots was no Grand Design on the part of Norwegian decision-makers at the close of World War II. Establishing this position was just as much a consequence of Norwegian politicians

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<sup>11</sup> Arne Drogseth's note "Amerikansk interesse for anlegg av aluminiumverk istedenfor jernverk i Mo i Rana", 11.5.49, RA, ADA, box 19

<sup>12</sup> Arne Drogseth's note, "Konferanse i Paris 8/12 1949 med generaldirektør Mürer", 16.12.49, RA, ADA, box 19

<sup>13</sup> Ingulstad, Mats: Cold War and Hot Metal: American Strategic Materials Policy, the Marshall Plan and the Loan to the Sunndal Smelter, *Cahiers d'histoire de l'aluminium*, special issue 2, 2007: 125-144

responding to outside impulses and reacting to Norwegian economic problems. During the 1950s and 1960s however, exporting ingots clearly became the primary role of ÅSV, eagerly supported by Norwegian politicians.

### **ÅSV exporting ingots for foreign currency**

ÅSV never targeted the domestic market. Initially this could be explained by a wish not to compete with the private enterprise Norsk Aluminium Company (Naco), which traditionally catered for the domestic market through its fabricating subsidiary Nordisk Aluminiumindustri (NAI). Within few years, it became obvious that ÅSV would not sell in Norway even if the fabricator needed metal. The sales policy of ÅSV clearly was informed by priorities within the political apparatus.

Before the war, NAI could absorb only parts of the Naco output of primary aluminium. When domestic demand was unleashed in 1945, the capacity of NAI was expanded. Within a few years, NAI was looking to Årdal for ingot. In dominant political organs there no longer was any idea of expanding Norwegian fabricating. The Agency of supplies in 1951 had its Office of iron, steel and metals make a review of the NAI production programme, and proposed a reduction of 348 tons pr year (tpy) for the Minister of Trade. The problem was that fabricated products predominantly would be consumed domestically. This would not do, for two reasons. A reduction of domestic consumption was needed as a part of the economic and military cooperation Norway participated in, and one needed to export as much as possible in order to pay for other supplies.<sup>14</sup> The political signals found their way to the board of Årdal Verk, as the minutes of one of the meetings state “the authorities” had asked Årdal to minimise its domestic sales.<sup>15</sup> The state’s aluminium company heeded the political signals. The Ministry of Trade was frequently mentioned in the board-meetings of Årdal Verk in this period, expressing strong wishes for as large sales as possible to the US.<sup>16</sup> In complying with this request, Årdal faced a relative loss, as exports to the US fetched Canadian export prices, whereas sales to Europe could have attracted better prices, albeit not in US Dollars.<sup>17</sup> Foreign currency was better than squandering aluminium in domestic consumption, and US Dollars was better than any other currency. The primacy of exporting ingots was amply demonstrated in 1952. Naco/NAI approached ÅSV asking for a long-term

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<sup>14</sup> Note from the Agency of Supplies to the Minister of Trade, “Forsyning og forbruk av aluminium”, 14.2.51; Note from the Office of Iron, Steel and Metals to the Agency of Supplies, Forsynings situasjonen med hensyn til aluminium, 8.2.51, RA, ADA, box 20

<sup>15</sup> Minutes from the board of Årdal Verk 30.7.51, item 2, Norsk Hydros historiske arkiver (NHHA) [Norsk Hydro’s historical archives], Notodden, ÅSV’s Topplederarkiv (ÅSVTLA) [Archives of ÅSV’s Top Management], box 2256

<sup>16</sup> See e.g minutes from the Board of Årdal Verk, 24.10.50, item 4, NHHA, ÅSVTLA, box 2256

<sup>17</sup> Minutes from the Board of Årdal Verk 15.5.50, item 2, NHHA, ÅSVTLA, box 2256

agreement supplying the fabricator. ÅSV turned it down out of hand, much to Naco's irritation.<sup>18</sup> Furnishing fabricators in Norway certainly was not ÅSV's task.

Ingot's primacy was equally obvious when ÅSV's capacity at the original site at Årdal was expanded by 36 000 tpy in 1955.<sup>19</sup> There was an opportunity for growth as global demand was increasing, and global capacity did not keep up. Fabricating was no issue. In a paragraph discussing market conditions, ÅSV stated that the rather high tariffs on primary metal of the Federal Republic of Germany (FRG), Italy, France and Switzerland would be of no consequence. In most cases, one would be able to achieve duty free import for metal which would be re-exported after fabricating. Obviously, Norway would produce the metal; the further processing would be located elsewhere.

The expansion of Årdal in 1955 had another attraction as well, seen from the Ministry of Trade. This would be a source of foreign currency, even precious US Dollars. The plan for financing the new plant was deliberately designed for this matter. ÅSV had managed to secure a loan from giant US aluminium company Alcoa. Actually, the loan by far exceeded the rather limited need for foreign currency in building the works. Now, ÅSV would be willing to hand these precious dollars over to the treasury, in exchange for counterpart funds in whatever softer currency it needed. The loan from Alcoa for expanding at Årdal would be payable in aluminium, in the same manner as the loan funding building at Sunndalsøra in 1951. Thus, a fairly large part of Årdal's production would be at the disposal of Alcoa, either as down payments on the loan, or as barter-metal. Integrated in the deal, Alcoa was to supply ÅSV with alumina, payable by primary metal. This was an agreement parallel to an agreement with Alcan from 1947, where setting up an alumina plant in Norway was substituted for a barter-agreement. Barter-agreements and loans payable in aluminium gave ÅSV little incentive for focusing on fabricating. A substantial amount of the production was sold even before it was transformed to metal. The remainder found an easy outlet on the European market, hungry for aluminium. ÅSV fulfilled its task brilliantly; it brought foreign currency to Norway, without putting strains on the domestic supply of capital. The Ministry of Industry made approving remarks to the ÅSV-plans, and Parliament never debated the fundamentals of the strategy.

Mr. Aage Owe, CEO of ÅSV never left this strategy. In 1960 he was summoned to the Minister of Industry for discussing problems of the state-owned munitions producer Raufoss Ammunisjonsfabrikk facing less military demand.<sup>20</sup> A possible solution for this company was to expand its small activity in aluminium fabricating, targeting civilian demand. For this to be viable, Raufoss needed to buy aluminium below world prices. Fabricating in this case obviously was conceived primarily as a means of securing employment at Raufoss. Owe was

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<sup>18</sup> Letter from ÅSV to Naco 21.2.1952, and Naco to ÅSV 7.3.52, both in NHHA, Nacos arkiv [Naco's archive], box 36, file 1187-141

<sup>19</sup> On the 1955 expansion: St.meld. 93 (1955)

<sup>20</sup> Aage Owe's note "Produksjon av aluminium og halvfabrikata/Møte hos statsråd Holler 16.11.60", 17.11.60, NHHA, ÅSVTLA, box 2278, file GD ekspansjonsplaner 1960

very unwilling to commit ÅSV to such a policy, stating that selling below world prices would be frowned upon within the industry, signalling that there existed some sort of informal agreements among primary producers. If a situation arose where every fabricator was backed by a primary producer, one would effectively undermine real ingot-prices, Owe stated. This would least of all be to the benefit of Norway, being a major producer of primary metal, now aiming to expand even further. The cautious Owe thus was very much entrenched in ingot's primacy. In this he actually was in line with the fundamentals of Norwegian official policy, although politicians sometimes could be tempted to stray away from the straight and narrow, as they did in the Raufoss case.

### **Targeting independent fabricators, the expansion scheme of 1960 and the problems inherent**

The success of ÅSV in this period to some degree was dependant on a peculiarity of the aluminium industry.<sup>21</sup> The large aluminium companies of North America and Europe had always been vertically integrated, controlling the chain of value from bauxite to semi-fabricated products. However, in Europe there traditionally had existed a large independent fabricating sector as well, comprising a number of small and medium sized rolling mills. We will use the development in rolling to illustrate the general point of vertical integration in the aluminium industry.

In the late 1950s, independent fabricators still accounted for a large proportion of rolled aluminium products. Compared to the USA, it was easier for independent fabricators to compete because the European aluminium market was still based on narrow widths and small unit weights. In such a market independent companies could build suitable plants with their limited financial means. These independent fabricators were the customer basis targeted by ÅSV. This strategy was another reason for ÅSV to refrain from going into fabricating. If it aimed for fabricating, it would be competing with its own customer base. The fact that ÅSV exclusively was a producer of primary metal was one of the reasons ÅSV had succeeded in targeting the independents.

In the second half of the 1950s, however, the strategy of targeting independents faced a danger. In the US, the first high capacity aluminium hot mill was established before World War II. During the war several such mills were established, and after 1945 all major American aluminium companies had acquired such mills. In Europe two such mills were built after 1945; one by Alcan in Rogerstone, Great Britain, one by the French state in Issoire, France. At the time of construction, the European aluminium market had not yet grown to a size justifying these mills. Therefore these mills operated far below capacity in the 1950s, and the smaller independent mills continued for some time to be competitive.

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<sup>21</sup> This outline of the development of the aluminium industry draws heavily on Jan Reimers: "Undersøkelse av norsk aluminiumvalsverk": 34-41, Commissioned study, RA, arkiv 3797, Industridepartementens arkiv (IA) [Archives of the Department of Industry], series Dda-VI, Box 239



1957 proved to be a turning point for the aluminium industry in the Western world. Production now exceeded demand, and the Treaty of Rome establishing the EEC was signed. Though unrelated in their origin, these two facts posed a threat to ÅSV. Larger units of production now became economically attractive due to the growth in European consumption and the future possibilities of a European common market. Labour shortage and increasing labour costs made costly high capacity equipment attractive. Demand lagged capacity especially in North America, so European exporters faced tougher competition. American companies now wished to control European rolling mills to find outlets for American surplus metal, and to participate in the growth possibilities of the EEC. Faced with the aggressive policy of the North American companies, the European aluminium industry took measures to defend their independence and improve their competitive position by mergers. In the face of these trends it would become increasingly difficult for ÅSV to market large tonnages of primary aluminium in Europe. This seems to have worried ÅSV to a far greater extent than it worried Norwegian politicians.

Norwegian politicians only gradually came to embrace the strategy of expanding in aluminium in the late 1940s. By 1960 all caution was long gone, and Norway embarked on an ambitious expansion programme. Anybody doubting the future of aluminium could consult Erik Brofoss, an aluminium infidel now very much reformed. Speaking from his position at the helm of the National Bank of Norway he saw no problem. Any preferential trade agreement in Europe would be of no consequence, as there simply was no possibility of the states in question becoming self-supplied in aluminium. The limiting factor facing Norway was access to capital, not access to markets.<sup>22</sup> The Ministry of Industry followed suit. By the summer of 1960 the permanent Secretary of Industry proposed a scheme for expanding Norwegian primary capacity by some 5 – 600 000 tpy to 7 – 800 000 tpy within 10 years.<sup>23</sup> Kjell Holler, the Minister of Industry, commented that attracting foreign capital for developing Norway's economy was a high priority. Projects in aluminium would be among the easier to implement, thus one should begin in this sector.<sup>24</sup>

The appetite for expansion was greater among the politicians and bureaucrats than with Mr. Owe. He cautioned that presently there was a large excess capacity as the North Americans penetrated the European market, giving momentum to the persistent tendency of vertical integration, undermining ÅSVs strategy of targeting independents. Thus there was a considerable risk in establishing several new communities of some 8 – 10 000 people around

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<sup>22</sup> Erik Brofoss, *Planene for økonomisk integrasjon i Europa. Fire forelesninger ved Norges Tekniske Høgskole, Januar 1958*, [Trondheim 1958]: 72, 80

<sup>23</sup> Permanent Secretary Skjerdal's note, "Langtidsprogram for utbygging av vår aluminiumindustri", [13.6.60], NHHA, ÅSVTLA, box 2278, file GD ekspansjonsplaner 1960

<sup>24</sup> Note, "Den videre utbygging av vår aluminiumindustri. Referat fra et diskusjonsmøte på Hotell Viking 2. september 1960", 10.9.60, NHHA, ÅSVTLA, box 2278, file Ekspansjonsplaner Harvey Aluminium 1961

new smelters, and the prudent approach would be a slower expansion, preferably under the auspices of ÅSV.<sup>25</sup>

The politicians would have none of it. The Minister of Trade said it was important to join the expansion while there still was time. The Minister of Industry seconded, expressing fears that nuclear energy in a not too distant future would diminish the value of Norwegian hydro power. Mr. Trygve Lie, member of Cabinet assigned to attract foreign investments, warned that in a few years all turmoil in Africa might be over, thus making this continent a competitor for Norway.<sup>26</sup> There would be no halting of this expansion plan, which did nothing to end the period of ingot's primacy.

Owe's cautious approach seems to have annoyed expansionist Kjell Holler. Mr. Holler asked Owe to name his chosen venue for setting up a third plant, and the Minister should set it aside immediately.<sup>27</sup> With Owe dragging his feet, Mr. Holler told him to stop worrying about the market and get on with it. Owe was loath to install capacity which might face periods of standstill. In Norway one could hardly imagine firing a large proportion of the workforce the moment market considerations suggested it. This was even less likely for the state-owned ÅSV, the pride of the Labour government. Mr. Holler wanted expansion and foreign currency for Norway. ÅSV was a tool in achieving this. Mr. Owe, being the custodian of the tool, always saw defending the integrity of the tool as his chief mission.

### **Joining up with Harvey in fabricating for Europe?**

The problem of the vanishing independent fabricators was a recurrent theme in Owe's discussions with Holler. How was ÅSV to respond? The choice seemed to be between forming an alliance with existing fabricators and taking up fabricating for itself. Categorically Owe stated that until now the latter had been impossible due to prohibitive tariff walls against Norwegian fabricated goods.<sup>28</sup> This suggests that even if ÅSV had been asked to embark on fabricating during the 1950s, access to markets would have been a major obstacle. If Norway became a member of a common market, Owe now said, one might start to think about fabricating in Norway.

Indeed, fabricating in Norway was a topic of interest for politicians, although exploiting the benefits of cheap hydro power while there still was time always remained the primary interest. A government white paper on the expansion of energy intensive industry in 1962 discussed the issue of fabricating. The Ministry of Industry was very much aware of the

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<sup>25</sup> Note, "Den videre utbygging av vår aluminiumindustri. Referat fra et diskusjonsmøte på Hotell Viking 2. september 1960", 10.9.60, NHHA, ÅSVTLA, box 2278, file Ekspansjonsplaner Harvey Aluminium 1961

<sup>26</sup> Note, "Den videre utbygging av vår aluminiumindustri. Referat fra et diskusjonsmøte på Hotell Viking 2. september 1960", 10.9.60, NHHA, ÅSVTLA, box 2278, file Ekspansjonsplaner Harvey Aluminium 1961

<sup>27</sup> Aage Owe's note "Produksjon av aluminium og halvfabrikata/Møte hos statsråd Holler 16.11.60", 17.11.60, NHHA, ÅSVTLA, box 2278, file GD ekspansjonsplaner 1960

<sup>28</sup> Aage Owe's note "Verkets ekspansjonsplaner/Konferanse hos statsråd Holler 25. august 1961", 1.9.61, NHHA, ÅSVTLA, box 2278, file GD ekspansjonsplaner 1961

fact that Norway faced no comparative advantage in fabricating. If Norway was to succeed in fabricating, one would have to depend on cooperating with foreign companies already being in the business. As there were companies, obviously American, wanting to get into the market of Western Europe, the Ministry saw an opportunity.<sup>29</sup> Negotiations along these lines actually were proceeding as the white paper was being written.

In January 1961 US aluminium company Harvey Aluminium had contacted Mr. Trygve Lie asking to buy ÅSV. While this was impossible, Mr. Lie encouraged a partnership of the two companies.<sup>30</sup> Harvey at the time already had been in contact with ÅSV for some years, and now a year and a half of intense negotiations followed. Harvey's ambition was to get into the European market, and was interested in smelting as well as in fabricating in Norway. Referring to the process of integration within industry, Mr. Lawrence Harvey found integration into fabricating a necessity for success. The fabricating scheme was what made Harvey's plans especially interesting to Norwegian politicians.<sup>31</sup> A project dated January 1962 comprised a wire and cable mill, an extrusion plant and a continuous sheet mill with a combined capacity of some 51 000 tpy. The Norwegian state, or ÅSV, was invited to participate with a 51 % share in the undertaking.

At this stage, the project was known under the apt name ALAS. Alas, Mr. Owe of ÅSV in April 1962 found the whole scheme unacceptable, as it gave ALAS too strong position towards ÅSV. In the Ministry of Industry someone now made comments in the margins of Owe's letter, suggesting that these problems should not be allowed to derail the process.<sup>32</sup> During the summer of 1962, Harvey returned to Norway with a project called Haralco, which ÅSV was supposed to furnish with molten primary aluminium metal, quantities reaching 45 000 tpy by five years. Mr. Trygve Lie sent the draft to Mr. Brofoss, stating that it was an interesting scheme, if only Owe could prove to be more amenable than before. Brofoss looked at the draft, and returned it with a hope that it would become reality.<sup>33</sup>

In dealing with Norwegian politicians Harvey expressed ideas of even further expansion in fabricating, reaching 100 000 tpy by 1971. This tonnage was first and foremost thought marketed in Europe. Harvey stressed the urgency, as Alcoa, Reynolds, Kaiser and Alcan all had been active in acquiring independent fabricators in Europe. Harvey's aim was to take on this competition in the European market, and needed to move swiftly. Owe wanted more time, especially for completing ÅSV's studies of setting up fabricating itself. The

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<sup>29</sup> St. meld. nr. 6 (1962-63): 61-65

<sup>30</sup> Note, "Møte hos generaldirektør Rolf Østbye, Norsk Hydro, den 10. juni 1963", 11.6.63, RA, ID, Series Dda – VI, box 233

<sup>31</sup> Note, "Møte med Mr. Lawrence A. Harvey og representanter for Olsen & Ugelstad den 23. august 1961", 26.8.61, RA, ID, Series Dcb-V-2, box 19

<sup>32</sup> Letter, Owe to the Ministry of Industry, 24.4.62 RA, ID, Series Dda – VI, box 233

<sup>33</sup> Agreement, Draft No.3. 8/7/62, RA, ID, Series Dcb-V-2, box 19

negotiations ended with Harvey and Mr. Lie being disappointed in Mr. Owe, although Owe and ÅSV never said formally no to Harvey's projects.<sup>34</sup>

Mr. Lie soon found someone willing to do what Owe was loath to. In conversations with representatives for the Norwegian company Norsk Hydro, Mr. Lie in a supposed slip of the tongue mentioned that Harvey was interested in moving into Norway.<sup>35</sup> Under the government expansion scheme of 1960 Hydro, much to Mr. Owe's irritation had been invited to move into aluminium. In the aftermath of World War II the German shares in Norsk Hydro had been confiscated by the Norwegian state, making the state the largest owner. Mr. Owe never saw the need for this state-owned company to take up the competition with his own state-owned aluminium company. In the period of rapid expansion Norwegian politicians obviously thought differently. By August 1962 Hydro's negotiations with French aluminium company Pechiney and Swiss AIAG had run aground, and Mr. Lie's remarks set Hydro on a new course. Parallel with the ÅSV-negotiations, Harvey now negotiated with Hydro, countersigning an agreement by 14<sup>th</sup> December 1962. The resultant joint venture termed Alnor comprised a smelter with capacity of some 90 000 tpy, and fabricating facilities along the lines of ALAS. By 1972 Alnor had reached a capacity of 120 000 tpy in primary metal and 48 000 tpy of semi-fabricated products.<sup>36</sup> The result thus was far off the 100 000 tpy Harvey had indicated in 1962, but of course, the expected Norwegian membership in a European common market never materialised. Establishing EFTA catered for a market for Alnor's semi-fabricated products in the UK, but this was not sufficient for marketing really large tonnages.

Really large scale fabricating in Norway always depended on Norway entering the EEC. Let us illustrate. The Ministry of Industry in 1962 commissioned a study on the possibility of setting up a large rolling mill in Norway, with a capacity of at least 80 000 and maximum 200 000 tpy.<sup>37</sup> This was quite another scale than the existent rolling mill of NAI, now about to be expanded to 24 000 tpy. The latter served the domestic demand and exported a minor part of the production, mainly to the Scandinavian neighbours where Norway faced no tariffs. The idea of the possible new mill was to target European export-markets. The report explicitly stated that such a mill had little to recommend for itself if viewed isolated from the larger context of securing the capital invested in Norwegian aluminium industry. Especially, it was hoped to secure ÅSV's position, as all other aluminium industry in Norway already was tied to large foreign companies, securing sales of metal produced. An absolute condition for this project was Norwegian membership in the EEC, as the expected external tariff on rolled products was a prohibitive 15 %. Of course, neither Norwegian membership

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<sup>34</sup> Note, "Drøftinger med representanter for Harvey Aluminium i tiden 10. til 21. august 1962", 30.8.62, RA, ID, Series Dcb-V-2, box 19

<sup>35</sup> Note, "Alnor/Konferanse med direktør Holte, 2.9.63", NHHA, ÅSVTLA, box 2278, file Ekspansjonsplaner Harvey Aluminium 1963

<sup>36</sup> Appendix to special annex no 2, St. prp. 126 (1972-73)

<sup>37</sup> Reimers *op. cit*

nor the large rolling mill materialised. As Mr. Owe's condition for embarking on large scale fabricating was not met, ÅSV turned its attention towards alternative strategies.

### **ÅSV joining up with Alcan for a balanced expansion**

The attitude towards foreign involvement in Norwegian aluminium industry obviously had changed since Alcan was found to be indigestible in 1949. Signs suggest the change occurred only a few years after 1949. By 1953 Norwegian company Elkem was allowed, indeed invited, to establish a joint venture with Swiss company AIAG for setting up a smelter in Mosjøen in the north of Norway.<sup>38</sup> To reigning Labour, the dual point of this undertaking was to develop Northern Norway and create export revenue. Initially Elkem as well as the politicians imagined establishing a ferro-alloy plant. Only gradually did Elkem decide on aluminium, and to Labour one metal was as good as the next, as long it would fetch export revenue. Although very familiar with important parts of technology for making aluminium, Elkem preferred a joint venture with a foreign, experienced partner. By the early 1950s this no longer was frowned upon by the government. In the documents of the 1960s, joining up with foreign partners is rather seen as an advantage, even a prerequisite.

In light of this, new possibilities opened up for ÅSV. Early in the summer of 1963 Mr. Owe travelled through USA and Canada, meeting with all major aluminium companies.<sup>39</sup> Particularly interesting is his talks with Alcan. Prior to this, Alcan's representatives in Europe had aired ideas of cooperation, which now again were considered. Alcan preferred a complete merger of the two in some form, but was open to other possibilities as well. Owe commented that even three years earlier such a scheme would have been unthinkable, but now the official stand on foreign involvement had changed radically. The notion could not be dismissed out of hand, but would certainly need much work before one could reach an agreement. At the time this was only one of a substantial number of partners and solutions considered by ÅSV, but this was the one that finally came about.

Although ÅSV hesitated in setting up the third smelter, it was interested in expanding its capacity for primary metal. After all, this was what the Ministry of industry wanted from ÅSV. In March 1965 ÅSV informed the Ministry of its plans to expand the works at Sunndalsøra by 45 000 tpy, reaching 100 000 tpy.<sup>40</sup> Alumina would be supplied on barter, and the company said that thanks to its established relations with independent fabricators and its competitiveness, it was not worried for marketing the increased tonnages for sale. The ministry commented by pointing to the increased revenue in foreign currency from the expansion, and noted that the expansion did not require allocating funds in government

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<sup>38</sup> On Elkem's decision to move into aluminium: Knut Sogner: *Skaperkraft. Elkem gjennom 100 år*, Oslo 2003: 142-146

<sup>39</sup> Aage Owe's note "Reise til Canada og USA mai/juni 1963", NHHA, ÅSVTLA, box 2278, file Ekspansjonsplaner Harvey Aluminium 1961

<sup>40</sup> On the expansion of 1965: St. prp. nr. 116 (1964-65)

budgets. Neither party thus referred to the structural problems of the industry, of which both parties obviously were very much aware. Probably both parties saw no advantage in communicating this to Parliament, thus falling back on the entrenched logic of ingot's primacy.

Members of Parliament certainly were taken aback when the idea of letting Alcan buy 50 % of the shares of ÅSV was sprung on them in 1966, as there had been no mentioning of problems a year earlier. The main point of the deal was making ÅSV Alcan's main supplier of ingots in Europe.<sup>41</sup> Structurally the deal was very sound. ÅSV would be guaranteed sales of its ingots without having to invest heavily in fabricating with marginal profits; Alcan liberated primary capacity in Canada from supplying its fabricators in Europe.

It would be wrong to look at the ÅSV-Alcan deal as any serious readjusting of strategies. The deal was made after Mr. Jean Michelet had become CEO of ÅSV, but Mr. Owe, now a consultant for the company, publicly defended the deal and gave its approval.<sup>42</sup> The deal was the making of ÅSV with the Ministry primarily responding to company action. But, as mentioned above, the deal did not materialise from thin air in 1966. Furthermore, the logic of the deal conformed to the policy underlying ÅSV's strategies since the very beginning, and to the policies of Labour's long reign in government. Labour giving way to a centre-right coalition in 1965 should not be attributed much explanatory power in this respect. In Parliament only three votes were cast against the deal, with Labour accepting the logic of it.

One easily gets the impression that ÅSV by joining up with Alcan abandoned any aspiration of becoming a fabricator in its own right. Actually the opposite was the case. The question of fabricating now had occupied ÅSV for quite some years, but there were always major obstacles for embarking on this. ÅSV had no experience in fabricating, which in itself was a problem. Domestic demand was already met by NAI. Large scale fabricating in Norway targeting export was unthinkable as Norway was not an EEC-member. Commercially, a better solution would be to take up fabricating within the markets. However, diverting capital from domestic investment to investment abroad was hardly a strategy a currency-earner as ÅSV should adopt.

By the Alcan-deal ÅSV found an entry to fabricating, as Alcan's subsidiary Naco/NAI was thrown into the bargain. Naco's modest smelter with a capacity of 24 000 tons was hardly what attracted ÅSV, but NAI's fabricating activities did. By acquiring NAI, ÅSV got hold of competence, the lion's share of the domestic market and a market share in Scandinavia. From this, it was hoped to develop fabricating activities in Norway when business merit warranted it, targeting domestic as well as foreign markets. Communicating ÅSV's long term plan to the

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<sup>41</sup> On the deal of 1966: St. prp. nr. 45 (1966-67)

<sup>42</sup> *Verdens Gang* 23.12.66

Ministry of industry in 1967, ÅSV pointed out that this would be a gradual process.<sup>43</sup> It seems as if the ÅSV-idea indeed was to develop fabricating, but not to make itself dependent on this. With Alcan owning 50 % of the shares, ÅSV was secured alumina and market, thus moving cautiously into fabricating and substantially expanding in melting posed no major risk. In closing the letter to the Ministry, ÅSV asked for more energy. Unfortunately for ÅSV, energy now was about to be ascribed a new value. The days of frantic expansion for exploiting Norwegian hydro power while there was still time, were ending.

### The period of consolidation

The 1970s saw a complete reversal of ÅSV strategies. This reversal was hardly justified by business consideration, and must predominantly be attributed to changes in the political climate in Norway. It was a change due to the realisation of the fact that energy was a scarce resource, an upsurge in nationalism and a revival in the faith of government planning and control of industry.

### Energy becoming a scarcity

The perception of energy, its value and the wisdom of using it for making primary aluminium changed gradually. In the government's Long Term Programme for the period 1970-73, one maintained that Norway still possessed a considerable undeveloped potential for hydro power. This should be the basis for further expansion in aluminium.<sup>44</sup> When discussing Norway's energy supply situation two years later, the Minister of industry commented on a new situation.<sup>45</sup> Referring to the 1950s, he said that at the time Norway faced no option. The primacy of ingot outlined above was indeed the only alternative, and a sound approach. Today, he continued, Norway faced a situation where three questions were pressing. How much of the remaining potential should be developed? What was the right speed of development? How should the increase in supply be used, and to what extent should energy intensive industry be expanded? The industry had signalled plans demanding a 100 % increase in energy supply by 1980. There was no way of finding room for this, and the minister was rather worried. Nevertheless, he urged a balanced development, allocating some new power to aluminium, although not fulfilling all wishes. He stated that strengthening primary production also would provide the best basis for expanding in fabricating.

Still two years later, the Long Term Programme for the period 1974-77 signalled yet another step away from the policies of the past.<sup>46</sup> There seemed to be very little opening for allocating more power to aluminium in years to come. The natural and sensible approach was said to be aloof in expanding primary capacity. Capacity should only be increased by making

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<sup>43</sup> Letter from ÅSV to the Ministry of Industry 15.9.67, reproduced by Sverre Nafstad: *Årdal og Sunndal verk a.s i årene 1965-1979*: 101ff (Upublisert manuskript [unpublished manuscript], NHHA, ÅSVTLA, box 2250)

<sup>44</sup> St. meld. nr. 55 (1968-69): 162f

<sup>45</sup> St. tid (1970-71): 2892f

<sup>46</sup> St. meld. nr. 71 (1972-73): 98

existent plants more efficient. On the other hand, one would continue to work for further fabricating in Norway. From one perspective, this makes sense. Fabricating did not demand much energy. Fabricating created value added. Fabricating was labour intensive, thus creating alternative jobs for jobs lost in rationalising melting. One problem remained though; who would buy fabricated products from Norway?

### **Fabricating for the EEC-market?**

Norwegian aluminium industry always favoured Norwegian membership in the EC. The major problem was not really exporting primary metal to the EC. To a certain extent Brofoss was right in stating that EC would retain a structural deficit. Although capacity within EC probably grew more than he anticipated, demand grew more as well. The tariff wall of EC was not prohibitive for primary metal. In addition, EC operated a duty free quota securing the fabricating industry especially in FRG sufficient supplies. ÅSV was one of the chief beneficiaries from these quotas.

Fabricating was quite another matter, with excess capacity within EC. Thus the EC operated a 12 % tariff which indeed proved prohibitive for Norwegian export. Comparing Norwegian exports of semi-fabricated aluminium from 1960 to 1971 proves the point.

Norwegian production and exports of aluminium semi-fabricated products in 1000 tons						
	1960	1965	1968	1969	1970	1971
EC (the 6)	0,3	0,4	0,5	0,7	1,3	2,0
United Kingdom	-	0,5	2,9	9,2	16,6	18,8
Denmark	1,8	1,4	1,7	3,3	3,3	3,3
Ireland	-	-	-	-	-	0,1
Sweden	1,4	1,4	3,2	8,1	7,4	7,2
Other countries	1,6	1,0	3,8	4,1	5,1	5,2
Norwegian production in total	18,5	24,0	43,9	60,4	73,9	75,2
Source: Jean Michelet's note "Some key facts about the Norwegian aluminium industry", 1.12.72, NHHA, ÅSVTLA, box 2279, file Samarbeide ÅSV-Alcan 1972						

The significance of EFTA is rather obvious, as Norway's export to the UK increased dramatically in the latter part of the 1960s. The UK had operated a prohibitive tariff on fabricated products. Actually, creating a market in the UK was the major effect of EFTA in this respect, as Norway already could export duty free to her Scandinavian neighbours prior to EFTA. Equally obvious is the effect of the EEC, or rather the non-effect as the only consequence of EEC was to substitute the various existing tariffs for one common prohibitive tariff. This alone should serve to explain why Norwegian aluminium industry favoured membership.

Of course, this and all other arguments failed to convince a majority in the Norwegian referendum of September 1972, and Norway remained a non-member. In the aftermath



Norway negotiated a scheme towards duty-free trade with the EC in products of industry. Obviously responding to calls from EC industry, EC made aluminium a “sensitive commodity”. This warranted a 7 year transition period rather than the normal 4,5. Tariffs during this transition period is displayed in table x. In addition to this, the EC fixed a ceiling for imports from Norway, displayed in table y. Furthermore, aluminium would be a closely monitored item, with a possibility for EC to adopt policies to correct any adverse effects import would have on EC industry.

Table x. Tariff schedule for semi-fabricated aluminium, 1973 trade agreement between Norway and EC. Ad valorem							
1973	1974	1975	1976	1977	1978	1979	1980
11,4 %	10,8 %	10,2 %	9,0 %	7,2 %	3,0 %	2,7 %	0
Source: St. prp 126 (1972-73): 17							

Table Y. EC import ceilings for semi-fabricated aluminium, tons, 1973 trade agreement between Norway and EC							
	1973	1974	1975	1976	1977	1978	1979
Cable/extrusions	12 000	12 600	13 200	13 900	14 600	15 300	16 100
Rolled products	18 000	18 900	19 800	20 800	21 900	23 000	24 100
Source: Special annex no 2 to St. prp 126 (1972-73): 19							

In practice, this barred Norway from marketing large scale tonnages until 1980. The aluminium industry of Norway was highly frustrated by these provisions of the 1973 agreement. Heeding government policy signals and expecting a further liberalisation of trade, in 1973 planned capacity for semi-fabricated aluminium by 1980 was 150 000 tons, 95 000 of which was expected to be exported.<sup>47</sup>

### **The new policies of Labour**

The elections for Parliament in 1973 brought about major changes. Labour faced its worst result since the inter-war period, and had to deal with a vastly increased left-wing party harnessing political energy broken free in the rather fierce debate on Norway’s potential membership in the EC a year earlier. Labour returned to government, but with no majority in Parliament. Facing the left-wingers, Labour moved to the left to stop the leakage of voters. Integrated in this turn to the left was a new policy of industry. Government and Parliament was to have a deciding influence on the development of industry. The fundamentals of this

<sup>47</sup> Statement from Norwegian aluminium industry, reproduced in special annex 2 to St. prp. nr. 126 (1972-73): 18

policy were financial strength from Norway's petroleum activities, combined with various means of direct government control of industry.<sup>48</sup>

The first major task taken up by the incoming Minister of Industry, Mr. Ulveseth, was to undo the 1966 ÅSV-Alcan deal.<sup>49</sup> Alcan proved to be a very unwilling seller, and the Kingdom of Norway ended up paying very good money for 50 % of Alcan's ÅSV-shares. Now, there is no question there had been differences of opinion within the ÅSV board since the deal took effect in 1967. However, as late as November 1973 the Norwegian and the Canadian members had agreed on the fundamentals of further cooperation, based on the balanced approach outlined above.<sup>50</sup> This did not suffice for Mr. Ulveseth. The crux of the matter was that he needed more room of manoeuvre for exploiting ÅSV as a political tool. In the 1966 deal, Alcan's board members were given a de facto right to veto any substantial investment. This right to veto was what Labour bought in 1974.<sup>51</sup> Of course, the logic of 1966 was to expand where and when business merit warranted it. At the time, this posed no problem. In the 1970s, it did.

Ulveseth's white paper on the future of Norway's industry strongly underlined that industry had to be of benefit to society, and maintained that all industry not necessarily would have to be profitable in its own right.<sup>52</sup> Although such considerations were supposed to be applicable for limited periods, the underlying logic was clearly different from profit seeking private enterprise. Acquiring national control of ÅSV obviously was a major piece in the apparatus for implementing this new policy. The logic of the bill enabling the acquisition of the ÅSV-shares and the white paper on the future of Norway's industry fit perfectly to each other.

ÅSV clearly was given new guidelines. The aluminium industry would get additional energy only for rationalisation of existent plants. As this would reduce employment, expanding in fabricating should create alternative employment. Policy towards aluminium now was swung back to the ideas of 1946-48. Ulveseth now wanted to wrestle the Norwegian aluminium industry out of the hands of the major internationals. The barter-agreements of alumina for metal came under fire. They had been working well, Ulveseth admitted, but he wanted them undone. This would leave more metal for fabricating and marketing in the hands of Norwegians.<sup>53</sup>

The Ministry of Industry was clearly dissatisfied with ÅSV's performance in fabricating, underlining that an expansion in this had been a condition for the 1966 deal.

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<sup>48</sup> St. meld. nr. 67 (1974-75): 14

<sup>49</sup> Odd Gøthte: *Ærlig talt! Om industriskandaler, statsråder og annet*, [Oslo] 1988: 107; St. prp. 17 (1974-75)

<sup>50</sup> See document with title "ÅSV-gruppens målsetninger", reproduced in *Nafstad Årdal og Sunndal verk a.s i årene 1965-1979*: 239-242

<sup>51</sup> This point was explicitly made by Labour's spokesman for the case in the debate in Parliament, St.tid 1974: 2080

<sup>52</sup> St. meld. nr. 67 (1974-75): 6, 38

<sup>53</sup> St. meld. nr. 67 (1974-75): 105

ÅSV's fabricating activities were still modest with 55 000 tpy, one claimed in 1974.<sup>54</sup> Compared to primary production of 300 000 tpy this obviously was modest, but compared to the non-existence of ÅSV fabricating prior to 1966 this verdict is rather harsh. Now the Ministry wanted to expand substantially in fabricating, and pointed out that really large tonnages could be processed by a modern hot rolling mill.<sup>55</sup> This was another attempt at the scheme of 1962-63, but the basic obstacles were the same. In the white paper, market considerations for such a scheme were rather sanguine. Regarding access to EC markets, the Ministry referred to the considerations of the 1972 white paper suggesting Norwegian membership in the EC.<sup>56</sup> Although aware of the fact that membership was off and aluminium being a sensitive commodity, the Ministry failed to discuss the fundamental problems of the proposed strategy which is outlined above.

Such a modern hot mill would preferably be operated in cooperation between several Norwegian aluminium companies, the Ministry stated, signalling ambitions of placing ÅSV and Norsk Hydro under joint, tighter government control. Neither ÅSV nor Hydro cared much for such a scheme. ÅSV least of all wanted Hydro to take charge in Norwegian aluminium, as Hydro's aluminium activities for a long time had remained a nuisance to ÅSV and its partner Alcan. Although poor in financial results, Hydro's fabricating in Norway won the company a good standing with Norwegian politicians, especially as the period of ingot's primacy was coming to an end. This was a source of frustration within ÅSV/Alcan. In 1971 Alcan believed an educational campaign was needed for setting the record straight in the state-Hydro relationship, as both the public and the government were deluded. Alcan at the time calculated that Alnor's return on investment was 3,5 %, while the corresponding figure for ÅSV was 12 %. On a possible cooperation between ÅSV and Alnor the conclusion on the latter ran as follows: "Their record is sad. Future not sound. They are on the wrong course. Have nothing positive to bring into a corporation."<sup>57</sup>

The Ministry of Industry definitely thought differently. In 1975 the possibilities of closer integration of the state-owned aluminium activities of ÅSV and Hydro were an integral part of the new industrial regime. The Ministry wrote approvingly that Hydro right from the start had pushed hard for fabricating; now 50 % of the primary metal was processed at plants in Norway. Of the remainder, one half was processed at Hydro's plants abroad.<sup>58</sup> The Ministry said nothing about the profitability of Hydro's fabricating activities. The profitability in aluminium was no immediate problem for Hydro, as the company gained riches from its North Sea activities, really kicking in from 1977. Probably Hydro could have digested ÅSV from a business point of view. However, the plans implied more direct government

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<sup>54</sup> St. prp. nr. 17 (1974-75): 10f

<sup>55</sup> St. meld. nr. 67 (1974-75): 106

<sup>56</sup> St. meld. nr. 67 (1974-75): 50

<sup>57</sup> Note, "Møter i Montreal 21. og 22.4.1971", 29.4.71, NHHA, ÅSVTLA, box 2279, file Samarbeid ÅSV-Alcan 1971

<sup>58</sup> St. meld. nr. 67 (1974-75): 108

intervention, which was repugnant to the company. The management of Norsk Hydro successfully mobilised its traditions of private enterprise, political support from the Conservatives and trade unions within the company. In the face of this opposition, the designs on directly controlling Norsk Hydro were shelved.<sup>59</sup>

Thus no cooperation between the two Norwegian companies materialised, and ÅSV in the 1970s was left to fend for its own. Heeding policy signals it was supposed to diversify, and to integrate upstream as well as downstream at the same time. Unfortunately, the timing for embarking on this could hardly have been worse. Commenting on the year 1975, ÅSV stated that it had been the worst year of the aluminium industry since 1945. The general recession in the Western world had prompted a 22 % decrease in aluminium consumption compared to 1974.<sup>60</sup> To make things worse, ÅSV no longer had the same secure position as it had a few years prior to this. 1971 had been a year of slow markets as well. ÅSV at the time had stated that the partnership with Alcan had cushioned the impact of the downturn.<sup>61</sup> In 1975 ÅSV found itself in the unfamiliar position of losing money for the first time since the company was established.

### **ÅSV's road to bankruptcy**

Terminating the Alcan-deal seems to have been contrary to the wishes of the ÅSV top-management. CEO Jean Michelet found this to be an unwise decision.<sup>62</sup> Unfortunately, no in-depth analyses of the governance of ÅSV after 1974 exist thus far. What we do know, however, is that the Norwegian-Alcan relationship deteriorated in the wake of the 1974 deal which left Alcan a minority partner in ÅSV. In the fall of 1978 two representatives of Alcan demanded a meeting with Mr. Haukvik, Minister of Industry. They had a long list of grievances.<sup>63</sup>

Alcan believed ÅSV should remain an aluminium company, and should divest itself of its non-aluminium commitments, allowing management to concentrate on its main business and conserving cash for operations. Mr. Andersen, the senior civil servant preparing the Minister for the meeting, stated that ÅSV opting out of Saga Petrokjemi (a company processing petroleum, which was Alcan's primary target) would be sending a wrong signal to Norwegian industry. In aluminium, Alcan stated that "fabricating operations continue to be a drain on the Company's resources. Most are losing money in 1978." Alcan proposed a review and a process of specialisation as the remedy. ÅSV in Alcan's view remained in dire need for labour rationalisation in smelting, but the power costs in Norway were competitive. Alcan

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<sup>59</sup> Einar Lie: *Oljerikdommer og internasjonal ekspansjon. Hydro 1977-2005*, Oslo 2005: 37-43

<sup>60</sup> A/S Årdal og Sunndal Verk – beretning for 1975, annex 12 to St. meld. nr. 19 (1976-77): 66

<sup>61</sup> A/S Årdal og Sunndal Verk – beretning for 1971, annex 11 to St. meld. nr. 27 (1972-73): 56

<sup>62</sup> Peter Erik Innvik og John L. Kamsvåg: *Verket. Sunndal Verks historie gjennom 40 år*, Sunndal 1993: 209

<sup>63</sup> The Alcan position: Gerald Clark, "Review of A.S.V. Present and future situation, October 1978"; The Norwegian position: E. Andersen's note "Møte med Alcan 23. oktober kl. 0900", 19.10.78, Both in RA, ID, Series Dbf-IV-1, box 16, folder Alcan generelt

thus urged for making the most of Norwegian comparative advantages. Mr. Anderson commented that questions of fabricating and smelting were old and recurrent issues, and that the political goal remained clear. It was the task of the ÅSV management to come up with fabricating which could show reasonable profits. The Norwegian political goals were firmly entrenched, creating increasing friction between the majority and the minority partner. Alcan concluded that ÅSV was too dependant on aluminium ingot prices increasing more rapidly than costs increase, and insufficiently on a cost cutting program. The company was in a very unstable financial situation. Any adverse occurrence in 1978-81 would result in difficult financing circumstances, Alcan warned.

The final straw for Alcan turned out to be modernising the old smelter in Høyanger which ÅSV had taken over from the Alcan subsidiary Naco. In the Høyanger case what was at stake was not fabricating, but where to utilise the Norwegian comparative advantage in cheap hydro power. In Alcan's view this was a project with insufficient business merit, carried through mainly for social reasons. In responding to this, Mr. Andersen of the Ministry maintained that it should be well known that in Norway one viewed industry's responsibility towards society differently from in Canada. In this case the ÅSV board clearly let its national task of securing employment override business considerations; Mr. Andersen told his minister that the Norwegian members of the board shared Alcan's opinion of the business merit of the Høyanger project.<sup>64</sup> Alcan now decided to exercise its put right to sell its remaining ÅSV-shares to the Kingdom of Norway. ÅSV was now once again completely on its own.

The Ministry sent very clear signals that ÅSV should develop fabricating. ÅSV duly committed, and it did not necessarily do so against its better wisdom. CEO Håkon Sandvold as late as 1980 spoke favourably on continuing to spend money on expanding in fabricating, although ÅSV at the time would have made more money as a primary producer only. At the time he stated that aluminium was an industry where Norway had a strong position, even internationally. This could cater for expansion in fabricating abroad as well, but this should start from a position of strength at home.<sup>65</sup>

The ambitions of 1980 were dashed by 1981 and 1982 being bad years of aluminium in the Western world. Consumption was down 6 % from 1980 to 1981, and an additional 6 % down the next year. Vertically integrated companies had proven to be less susceptible to the downturn, ÅSV stated. Being among the largest exporters of primary metal in the world, the company had been especially hard hit.<sup>66</sup> The production figures show that that the fabricating strategy since 1974 had been utter failure. In 1982 primary production was 310 300 tons, with 65 600 being processed to semi-fabricated products in ÅSV-subsiaries. In 1974, the year when Mr. Ulveseth bought Alcan's right to veto, the figures were 307 200 tons of primary

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<sup>64</sup> E. Andersen's note "Alcan-ÅSV", 18.12.78, RA, ID, Series Dbf-IV-1, box 16, folder Alcan generelt)

<sup>65</sup> H. Sandvold's note Energi/Industri, 27.2.80 (reproduced in Sverre Nafstad: *Årdal og Sunndal Verk a.s. i årene 1980-1984*: 5-8 (Upublisert manuskript [Unpublished manuscript], NHHA, ÅSVTLA, box 2250)

<sup>66</sup> Årdal og Sunndal Verk a.s. – beretning for 1982, Annex no 1 to St. meld. nr 31 (1983-84): 10

metal and 50 000 tons of semi-fabricated products. Thus the percentage of ÅSV fabricating had increased from 16 to 21 %. Considering that this came about while ÅSV was supposed to scale down its sales to Alcan, this hardly placed ÅSV on firmer ground for meeting the recession of the early 1980s.

Though it is possible the Ministry, ÅSV and CEO Sandvold was aligned with the fabricating strategy in 1980, Sandvold was in no doubt about the wisdom of this strategy in 1982. Arguing for being exempt fee on electricity he delivered a harsh verdict on state policy towards ÅSV since 1974. As the Alcan-deal was undone, ÅSV had to negotiate long term contracts for alumina, which in 1982 resulted in building excess stocks at high costs. Furthermore, ÅSV now faced huge losses from fabricating, to a large degree built up to secure employment opportunities.<sup>67</sup> Refraining from getting into the blame game, we certainly can say his analysis was accurate.

In 1982 the share capital was lost, and ÅSV had to ask the Ministry to strengthen the company financially. Thus the Alcan verdict of 1978 was proven right. In the years 1978-81 the revenue from the smelting activities subsidised the other activities of the company. Investments in fabricating and non-aluminium proved to be a steady drain on the company's financial resources. These activities created employment, but did nothing to secure the profits of the company. When even the smelting lost huge amounts of money in 1982 due to a global collapse in aluminium, the consequence was obvious. For all the fuss about fabricating, what mattered to ÅSV remained the price of ingots. In 1983 ÅSV again made money, and 1984 saw an all time high in ÅSV-profits. Now the price of ingot served ÅSV well, but the underlying structural problems remained.

### The final chapter: consolidating by integrating abroad under Hydro auspices

Labour surrendered power in 1981, and the Ministry of Industry in the 1980s favoured rather different solutions from the 1970s. In august 1984, the Minister commented on ÅSV's plans. Although 1983 had been a good year and 1984 was promising, structural changes in the international order of industry was a source for concern. The changes underlined the importance of ÅSV securing a position in fabricating within the EC, being the most important market for Norwegian aluminium industry. Securing such a position would require substantial capital. The Ministry was informed of informal contacts between ÅSV and Hydro during 1983, and encouraged some form of cooperation between the two.<sup>68</sup>

At this time ÅSV and Hydro were in complete agreement on the future. Both companies found integrating into profitable fabricating in Europe was a necessity. Such a scheme was not viable by building new capacity, which would be costly and create

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<sup>67</sup> Letter, ÅSV to the Ministry of Finances, 3.9.82 (reproduced in Nafstad: *Årdal og Sunndal Verk a.s. i årene 1980-1984*: 170)

<sup>68</sup> Letter, Minister of Industry Jan P. Syse to ÅSV 6.8.84, reproduced in Nafstad: *Årdal og Sunndal Verk a.s. i årene 1980-1984*: 191f

devastating competition. One should integrate by buying existent capacity. Both companies thought it would be able to achieve this on its own, but *Norwegian* control of the process of integration probably would be better served if the two cooperated.<sup>69</sup> How to organise such cooperation was more problematic. Nothing materialised in 1984.

At the end of the day, only one possibility was realistic. A main point was to integrate into fabricating, which needed substantial financial strength. Hydro's financial strength was always superior to ÅSV's, thus making Hydro the better tool for consolidating Norwegian aluminium. While the price of aluminium reached a level where ÅSV hardly made money by December 1985, Hydro was in a position to acquire substantial fabricating capacity within the EC. In 1984 Hydro had bought Alcoa's extrusion plant in Châteauroux, France. At roughly this time Alcan decided to pull out of extrusion in Europe. ÅSV was offered Alcan's plants, but was not ready to close the deal. Thus the offer went to Hydro, who closed the deal during 1985-86, doubling its extrusion capacity making Hydro the largest producer in Europe. By this point, the plans of integrating ÅSV and Hydro had run aground, and ÅSV was about to enter negotiations with German VAW. Faced with this possibility, Hydro finally turned around and went for a merger with ÅSV. With surprising speed, a merger was negotiated, and ÅSV was merged with Norsk Hydro's aluminium activities. This decision now was supported by all major Norwegian political parties.<sup>70</sup>

The merger transformed Hydro from being a rather insignificant entity to becoming a recognised player in international aluminium. The changing roles of Hydro and German VAW illustrate the point. In 1986 the much larger VAW was an alternative candidate for buying ÅSV. In 2001 Hydro bought VAW, placing Hydro among the three biggest integrated aluminium companies in the world. Hydro's development since the early 1980s has been a story of internationalisation. In the grand scheme of things, it is possible to view this as an ambitious way of consolidating Norwegian aluminium industry. One part of the dream of the 1970s came true. Norwegian aluminium industry was taken out of the hands of the foreign multinationals. The irony is that the industry was consolidated by a Norwegian multinational. In Hydro the Norwegian comparative advantage in smelting was integrated in chains of production under Norwegian control. However, the investment policy of Hydro turned out to be based primarily on business-merit, in the same manner as Alcan's had been earlier. Hydro participated in up-stream activities where bauxite was to be found and fabricating primarily where markets were to be found. Neither was found in Norway.

At the turn of the century Hydro had been a company with activities in fertilisers, petroleum and aluminium. In 2004 the fertiliser activities were organised in a new company called Yara. In 2007 the petroleum division was merged with state company Statoil, leaving

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<sup>69</sup> Note, "Samarbeide ÅSV – Norsk Hydro", 3.9.84, reproduced in Nafstad: *Årdal og Sunndal Verk a.s. i årene 1980-1984*: 199f

<sup>70</sup> On Hydro in this period: Lie 2005: 172-202

Hydro as an aluminium company only. Hydro today still produces a substantial amount of its aluminium in Norway. Energy prices are still competitive enough for Hydro to invest in rationalisation of this production. It remains an open question how long this will continue. Currently Hydro is constructing the world's largest smelter in Qatar, where energy comes cheaper than in Norway.

The future of Hydro might put Norwegian politicians in an awkward position. Keeping Hydro involved in Norway depends on allocating sufficient energy at a price Hydro is willing to pay. Today however, smelting alumina is not the obvious way of exploiting Norwegian hydro power. Thus, some would argue for letting the market decide on this. Given time, this might lead to Hydro becoming even more of an international and less of a national Norwegian company. If such a situation arises: why should the Norwegian state continue to be a major shareholder in a company which so obviously no longer is a tool for exploiting national natural resources? Alternatively, Norwegian politicians might again take control of the tool, and instruct it to invest in Norway. However, this would fundamentally change the governance of the company, alienate the large private ownership and put the company at risk in competing on the global market on which it depends. It is no easy task fulfilling national tasks in global markets.