

DOWNSTREAMING – IS INDONESIA REALLY ON THE RIGHT PATH?

12345

INTRODUCTION

When former President Joko Widodo’s second term finally came to an end in October 2024, many commentators highlighted his commitment to making domestic processing and refining of all metal minerals a reality as being his defining legacy.

There seems to be a high degree of acceptance in Indonesia that, whatever his ethical and other failings may have been, the former President was an economic “visionary” who understood the “essential truth” that domestic processing and refining of metal minerals is the “key” to Indonesia’s future prosperity.

Indonesia’s new President, Prabowo Subianto, has made clear that his government intends to continue and, indeed, greatly expand the previous government’s policy of compulsory domestic processing and refining of metal minerals to include many other natural resources which Indonesia produces in abundance. By implication, the new President apparently accepts that his predecessor was, indeed, an economic “visionary”.

Domestic processing and refining of metal minerals, or “local value-added activity”, has now “morphed” into the more generic concept of “down-streaming” which, at least according to the government’s thinking, is applicable to any number of natural resources.

Only time will tell, of course, whether or not “down-streaming” plays the major role that is envisioned by the new President in delivering on his promise of “Golden Indonesia 2045”, with economic prosperity being assured for all Indonesians. There is, however, at least some reason to be sceptical about this and to question whether or not Indonesia is really “on the right path” in tying its economic future so firmly and unconditionally to “down-streaming” in its myriad forms.

In this article, the writer will consider what “down-streaming” now means/requires in the Indonesian context and why “down-streaming” could “come up short” and otherwise fail to deliver “Golden Indonesia 2045”.

¹ Bill Sullivan, Senior Foreign Counsel with Christian Teo & Partners and Senior Adviser to Stephenson Harwood.

² Bill Sullivan is the author of “*Mining Law & Regulatory Practice in Indonesia – A Primary Reference Source*” (Wiley, New York & Singapore 2013), the first internationally published, comprehensive book on Indonesia’s 2009 Mining Law and its implementing regulations.

³ Copyright in this article belongs to Bill Sullivan and Petromindo.

⁴ This article may not be reproduced for commercial purposes without the prior written consent of both Bill Sullivan and Petromindo.

⁵ An earlier version of this article appeared in the December 2024- January 2025 issue of Coal Metal Asia Magazine.

BACKGROUND

After some ten years of requiring domestic processing and refining of all metal minerals, Indonesia already has a large number of metal smelters in operation and with many more metal smelters in the planning and construction stages.

The exact number of metal smelters and whether they are already operational or still in the planning stage or in the construction stage only are somewhat hard to accurately determine and the numbers vary depending upon the information source. According to the Ministry of Energy & Mineral Resources, however, Indonesia (i) currently has 54 already operating metal smelters and (ii) within the next couple of years, will have 147 operating metal smelters. The 147 metal smelters comprise 120 pyrometallurgical smelters and 27 hydrometallurgical and other smelters.

The 120 pyrometallurgical smelters are all nickel smelters utilizing rotary kiln electric furnace technology to process saprolite (a low-grade nickel ore type) (**RKEF Smelters**) and include (i) 49 already operating RKEF Smelters, (ii) 35 RKEF Smelters that are under construction and (iii) 36 RKEF Smelters that are in the planning stage.

The 27 hydrometallurgical and other smelters include (i) 3 nickel smelters utilizing high pressure acid leaching technology to process limonite (another low-grade nickel ore type) (**HPAL Smelters**), (ii) 2 or possibly 3 copper smelters (including the huge Freeport Indonesia smelter in Gresik and the somewhat smaller but still very significant Amam Minerals smelter in West Sumbawa), (iii) 6 tin smelters, (iv) 1 manganese smelter, (v) up to 12 bauxite or alumina smelters (vi) 2 lead and zinc smelters and (vii) 2 iron/steel smelters. A few of the proposed bauxite/alumina smelters appear to be particularly problematic at this time.

Whatever the exact number of metal smelters and the precise breakdown of the relevant metal minerals as well as their actual planning stage, construction stage or already operational stage status, Indonesia has undeniably made significant, albeit very uneven, “progress” in making compulsory domestic processing and refining of all metal minerals (**Metal Minerals DP&R**) a reality.

The extraordinary number of RKEF Smelters highlights that nickel has been the standout “success” story of Metal Minerals DP&R. Successive governments have repeatedly cited the dramatic increase in Indonesia’s export earnings, from processed and refined nickel products, as unequivocal evidence that the country is “on the right path” with its policy of Metal Minerals DP&R.

Indonesia has a somewhat similar policy, to Metal Minerals DP&R, in place for coal. Indonesia’s largest coal producers (**i.e.**, former Coal Contract of Work holders which subsequently received Special Mining Business Licenses for Coal) have been under a legal obligation to carry out local value-added activity, in the form of so-called “development and utilization of coal” (**Coal Development & Utilization**), since 2020. Coal Development & Utilization includes (a) Coal Development in the form of (i) coal upgrading, (ii) coal briquetting, (iii) coke making, (iv) coal liquefaction, (v) coal gasification including underground coal gasification and (vi) coal slurry or coal water mixture and (b) Coal Utilization in the form of building mine mouth power plants.

In October 2023 and in the run-up to the February 2024 presidential election, a book was published under the title “*Strategic Ideas – Prabowo Subianto – National Transformation Strategy towards a Golden Indonesia 2045 – Indonesia is Becoming a Developed and Prosperous Country*” (**GI45 Book**). The GI45 Book outlines the now new President’s claimed views on the Indonesian economy and why it has, to date, failed to deliver the material advancement and prosperity to which

all Indonesians are supposedly “entitled” (**Golden Indonesia**). The GI45 Book also sets out the specific programs, goals and nation building ideals that need to be implemented, achieved and realized in order to finally deliver Golden Indonesia by 2045, being the centenary of Indonesia’s declaration of independence (**Golden Indonesia 2045**). A minimum of 8% annual GDP growth for Indonesia, over at least the next 10 years, is specified as being the essential economic “driver” for realizing Golden Indonesia 2045 (**8% GDP Growth Driver**).

The relevance of the 8% GDP Growth Driver, to possible forthcoming legal, policy and regulatory changes affecting the natural resources sectors, is to be found in what the GI45 Book says about how Indonesia’s natural resources, including sources of renewable energy, coal, metal minerals and oil & gas (as well as agricultural, forestry and maritime products) (together, **Natural Resources**), need to be controlled, developed and managed, going forward, in order to ensure the 8% GDP Growth Driver is realized. The GI45 Book is very clear in its ultimate conclusion that Golden Indonesia 2045 will **not** become a reality unless and until there are fundamental changes made to how Indonesia’s Natural Resources are controlled, developed and managed.

The GI45 Book emphasizes the claimed economic benefits already being obtained by Indonesia, in terms of increased government revenue and greater export values, as a result of the previous government banning the export of unprocessed metal minerals and insisting upon Metal Minerals DP&R. However, the GI45 Book also makes clear that there is still much more to be done in terms of ensuring that, going forward, Indonesia obtains even greater economic benefits from (i) Metal Minerals DP&R, particularly copper and (ii) insisting upon priority, in terms of the supply of processed and refined metal products, being given to emerging local manufacturing industries such as electric batteries and electric vehicles.

The programs, goals and nation building ideals that will deliver Golden Indonesia 2025 are expanded upon in a manifesto or policy document, entitled “*Visions, Missions & Programs*”, that was published shortly before the February 2024 presidential election by the then presidential candidate Prabowo Subianto and his then vice-presidential running mate Gibran Rakabuming Raka (**Policies Paper**).

The Policies Paper makes clear the importance of Indonesia’s Natural Resources, metal minerals in particular, as being the primary potential source of improved economic prosperity for Indonesia envisioned by Golden Indonesia 2045. To this end, the Policies Paper cites Indonesia’s so-called “*Nickel Derivative Product Export Value*” of US\$34.2 billion in 2023, which it claims is the “*highest in history*” and “*up 11.7 times*” from 2014’s US\$2.9 billion, as providing the “*Foundation of a Progressive Indonesia*”. The Policies Paper goes on to identify Indonesia’s nickel reserves, tin reserves, bauxite reserves and copper reserves as being “*Indicators of Indonesia’s Advanced Potential Capital*”.

ANALYSIS AND DISCUSSION

1. From Metal Minerals DP&R and Coal Development & Utilization to Down-streaming of Natural Resources

Highlighting just how important the much more broadly based “down-streaming” of Natural Resources has become to the new government of Prabowo Subianto and its pursuit of Golden Indonesia 2045, the Ministry of Investment has now been renamed the “Ministry of Investment **& Down-streaming**”

At an investor roundtable on 29 November 2024 and again on 9 December 2024, the newly appointed Minister of Investment & Down-streaming (who is also the head of the Investment Coordination Board or **BKPM**), Rosan Roeslani, announced that the new government is preparing a “roadmap” (i) for the downstream industrialization of 8 industries and (ii) focusing on 28 natural resource commodities.

The 8 industries are (i) minerals, (ii) coal, (iii) oil, (iv) natural gas, (v) maritime, (vi) fisheries, (vii) plantations and (viii) forestry.

The 28 natural resource commodities are (i) nickel, (ii) tin, (iii) copper, (iv) bauxite, (v) “stacy” iron, (vi) gold, (vii) silver, (viii) lead, (ix) asphalt, (x) sand, (xi) cobalt, (xii) “metals”, (xiii) petroleum, (xiv) natural gas, (xv) palm oil, (xvi) coconut, (xvii) rubber, (xviii) biofuel, (xix) logs, (xx) pine resin, (xxi) shrimp, (xxii) fish, (xxiii) crab, (xxiv) seaweed, (xxv) salt, (xxvi) nutmeg, (xxvii) chocolate and (xxviii) tilapia.

As reported in the 3 December 2024 edition of Jakarta Globe.id, Minister Roeslani expressly cited Indonesia’s “success” with “nickel industrialization” as being the impetus for the new government’s focus on widespread “down-streaming” across multiple industries and multiple Natural Resource commodities, saying:

"In the past, nickel exports without added value were around US\$ 3-4 billion from 2013 to 2015. Now, after downstream efforts, exports have surged to around US\$ 33 billion. This is just one example. The potential is immense, and while much work remains, we remain optimistic."

Again, as reported by Jakarta Globe.id, Minister Roeslani justified the new government’s choice of the particular 28 natural resources commodities, on which “down-streaming” would be focused, by reference to the size of Indonesia’s reserves of these commodities and the fact that the “nickel industrialization” “success story” was due to Indonesia having the world’s largest nickel reserves. More particularly, the Minister was quoted as having said:

*“We will prioritize these 28 commodities **based on which industries have the largest reserves.**”*

People who took the trouble to read the GI45 Book and study the Policies Paper, in the run-up to the February 2024 presidential election will, of course, not be surprised by Minister Roeslani’s announcement as such given that the new President’s support for a much expanded Natural Resources “down-streaming” industrial policy was made clear in both publications as highlighted in the Background section of this article. However, what is perhaps surprising is how quickly the new government has moved to make the proposed new “down-streaming” industrial policy a reality – a mere 6 weeks after the new President’s inauguration. It would seem then that, just sometimes, politicians really do “follow through” and actually implement their election campaign policy programs once they are in office.

Minister Roeslani has not said anything, **yet**, about “down-streaming” of Natural Resources being compulsory and otherwise a legal obligation of everyone holding business licenses in respect of the identified 8 industries and the identified 28 natural resources commodities. Who could seriously doubt, though, that this is the next step? It is surely not lost on the new government that large scale Metal Minerals DP&R, nickel in particular, only became a reality once it was made compulsory and exports of less than fully processing and refined metal mineral products were banned.

2. The Nickel Success Story

2.1 How Genuine a Success Story is it really?

It is, of course, impossible to deny the basic correctness of the “raw” export numbers, for nickel products and their dramatic increase over the past ten plus years, as repeatedly quoted with much pride by both the previous government and the new government including, most recently by Minister Roeslani. Accordingly, the writer is more than willing to accept that the gross value of Indonesia’s nickel exports has indeed increased from only US\$ 3-4 billion per year in 2013 to become US\$33 billion today. This is certainly **one possible** reference point that can be used to gauge the success of Indonesia’s Metal Minerals DP&R policy in respect of nickel.

Notwithstanding the above, however, it is surely reasonable to highlight that focusing exclusively (indeed some industry observers would, no doubt, say obsessively!!) on a gross ten-fold increase in nickel export earnings really only tells us “part of the story” in terms of what the economic and other consequences for Indonesia have been from compulsory domestic processing and refining of nickel.

Other reference points that previous government officials and representatives have also favoured from time to time are the (i) increase in government non-tax State revenue from the sale of large volumes of more highly priced processed and refined nickel products, (ii) increase in employment opportunities as new nickel smelters are built and enter into operation and (iii) reduced dependence on imported processed and refined nickel products as essential inputs for promising domestic industries.

Not everyone, though, accepts that the nickel domestic processing and refining “success story” is really as exceptional and unqualified as the government would have the Indonesian public believe. In this regard, reference may be usefully made to an article by researcher, Krisna Gupta, that was published in The Jakarta Post, in early April 2022, with the title “*Indonesia’s Claim that Banning Nickel Exports Spurs Down-streaming is Questionable*”. As Gupta points out, the government has failed to disclose any data which unequivocally establishes that banning the export of unprocessed and unrefined nickel ore has delivered or will, inevitably, deliver the benefits that are meant to flow from Metal Minerals DP&R including nickel ore. Gupta highlights that the government’s focus on the resulting increase in added value metal mineral exports could be seriously misleading as it overlooks the fact that (i) the Government may actually experience revenue loss, from reduced corporate tax and export duty collections, as a result of the numerous tax holidays and other incentives offered to investors in smelter projects, (ii) there may have simply been a transfer of added value from mining companies to domestic smelting companies as mining companies are forced to sell their mineral ore to domestic smelting companies at a far lower price than is available for mineral ore on the international market and (iii) any increase in employment opportunities in the metal mineral processing and refining industry may be offset by declining employment opportunities in the mineral ore mining industry. Other articles, such as The Wall Street Journal’s June 2023 “*EV Makers Confront the Nickel Pickle*” and Trend Asia’s September 2024 “*The Indonesia Nickel Pickle: The Labor and Employment Disarray at Indonesia Morowali Industrial Park*”, have highlighted the environmental problems associated with Metal Minerals DP&R in the case of nickel as well as poor wages and work safety conditions for local “blue collar” employees in local nickel processing and refining facilities.

Notwithstanding the inevitable lack of consensus that Metal Minerals DP&R has, in the case of nickel, been an unqualified success story for Indonesia even from an economic perspective, it is hard not to accept that Indonesia has still come out well ahead, **so far and at least economically**, from Metal Minerals DP&R in the case of nickel. It may well also be the case that those researchers and writers who have questioned whether Metal Minerals DP&R, in the case of nickel, can be justified, from an environmental perspective or after taking into account worker benefit and safety issues, have failed to recognize that Indonesia is still at a relatively early stage in its economic development where it is legitimate for the government to focus almost exclusively on economic advancement and GDP growth. Borrowing and extrapolating from the pioneering 1940s work of the renowned American psychologist, Abraham Maslow, it may be that countries, as well as individuals, have hierarchies of needs and wants such that it is only once a country's basic economic security needs are satisfied that a country then has the "luxury" of pursuing higher order wants such as a clean environment and high levels of worker benefits/safety. There is, indeed, more than an element of this in the new government's focus on the overriding importance of making the 8% GDP Growth Driver a reality and now in order to achieve Golden Indonesia 2045 which is primarily (although not exclusively) about material advancement and prosperity for the Indonesian people.

Given the above, perhaps a more nuanced assessment of the nickel domestic processing and refining "success story" is that it has been at least a **qualified** economic success to date and even if the government has chosen to "airbrush out" of its assessment some of the less attractive side-effects of the same. It is also undeniably consistent with advancing the realization of Golden Indonesia 2045, at least in the short term. Query, though, whether or not it makes much sense, in the longer term, for Indonesia to have 120 RKEF Smelters, using saprolite as their primary input and given Indonesia's reserves of saprolite are projected to be exhausted by as early as 2029. In addition, importing saprolite from the Philippines (as is already happening), in order to make up for the growing domestic shortage of saprolite, hardly seems to be consistent with the underlying premise of Indonesia's Metal Minerals DP&R policy; namely, it is in the economic interests of all Indonesians to ensure that maximum value is extracted from **this** country's **supposedly** abundant metal mineral resources (**no** other countries' **actually** abundant metal mineral resources!!!).

2.2 Can the Nickel Success Story be Easily Replicated?

2.2.1 **Preliminary Remarks:** Recognizing the truth, **at least in part**, of the nickel "success story" inevitably leads to the issue of whether or not the nickel "success story" is capable of being replicated by the new government across 28 other commodities in 8 industries.

Minister Roeslani's quoted remarks in Part 2.1 above would suggest the new government believes it is the size of Indonesia's reserves of particular commodities, relative to the size of world reserves of those particular commodities, that determines the success or otherwise of "down-streaming".

The relative size of Indonesia's reserves is, undoubtedly, an important consideration in the sense that, if Indonesia is the dominant world producer of a particular commodity (**i.e.**, Indonesia has the largest reserves or one of the largest reserves of that commodity), other countries and their industries needing supplies of that commodity simply have no alternative (or, at least, very few and not as attractive alternatives) but to buy their required supplies of that commodity from Indonesia and regardless of the price that Indonesia wants to charge

them for the same. However, the relative magnitude/ranking of Indonesia's reserves of a particular commodity is surely not the only relevant determining factor in whether or not it makes economic sense for Indonesia to insist upon the "down-streaming" of that commodity. Two other and equally important considerations would seem to be (i) the extent to which "down-streaming" can increase the export sales value of particular commodities and (ii) the capital investment required to "downstream"/cost involved in "down-streaming" particular commodities. In other words, is the resulting increase in export sales value of particular commodities from "down-streaming" and the other economic benefits that will result from that "down-streaming" sufficient to justify the magnitude of the associated required capital investment in/cost of "down-streaming"? The fact that neither of these considerations is mentioned by Minister Roeslani might suggest that the new government has overlooked a couple of key considerations in deciding that the nickel "success story" justifies the wholesale extension of the Metal Minerals DP&R policy to numerous other commodities. It is notable that both the GI45 Book and the Policies Paper likewise highlight the relative size of Indonesia's reserves of certain metal ores and not much else in proposing a major expansion of Metal Minerals DP&R to include numerous other commodities across multiple industries.

Numerous industry observers have pointed out that domestic processing and refining of nickel has certain characteristics which are simply not found in the case of domestic processing and refining of other metal minerals. More particularly, industry observers have noted that (i) the resulting increase in the market value of fully refined nickel products, compared to the market value of nickel ore, is much greater than the increase in the market value of fully refined copper products (e.g., copper cathodes) compared to the market value of copper ore or copper concentrate and (ii) building a nickel smelter involves significantly less capital investment than does building a copper smelter or an alumina smelter. Likewise, industry observers have noted that the number of full-time and long-term jobs for Indonesian workers, that will result from the construction of a new copper smelter and once it becomes fully operational, is quite small. In this regard, it has been suggested that Freeport Indonesia's newly completed copper smelter in Gresik (supposedly the largest in the world) is only likely to bring with it a maximum of 2,000 new long term or permanent jobs.

It is reasonable to question whether or not the above identified additional considerations might also be very relevant to some or all of the other 28 commodities to which the new "down-streaming" industrialization policy is going to apply.

The reality is that every industry and every commodity is different in terms of whether or not it is likely to be a good candidate for "down-streaming". Even within the metal minerals and coal mining industry, with its relatively long history of Metal Minerals DP&R/Coal Development & Utilization and notwithstanding the nickel "success" story, the relative lack of progress in making domestic processing and refining a reality for coal and various metal minerals apart from nickel should cause the new government to think long and hard about how easy it is going to be replicate the nickel success story in the case of other Natural Resources commodities and even in the case of other mineral commodities. A brief consideration of 3 other mineral commodities only hopefully serves to underscore this point.

2.2.2 Coal: Indonesia is the country with the 6th largest coal reserves in the world, albeit mostly low calorific or "steaming" coal. According to the new government and its focus on the relative magnitude of reserves of any particular commodity as being the key determinant of

“down-streaming” potential, Indonesia’s abundant coal reserves should mean that coal is a “no-brainer” as a viable candidate for “down-streaming”. Given also that coal has long been Indonesia’s most important mineral commodity export as well as by far the largest contributor of non-tax State revenue in the form of production royalties, it is easy to understand why the new government might want to believe that Coal Development & Utilization (which, under the new government, has become the “down-streaming” of coal) is an easy way to further increase the economic contribution of coal and help achieve the 8% GDP Growth Driver. The reality, however, is that despite the signing of numerous memoranda of understanding between coal producers and “strategic partners” in different countries (including China and the United States of America), offering various new technologies for coal upgrading and other “creative” value added uses of coal, Coal Development & Utilization or coal “down-streaming” has progressed very little since it became a compulsory obligation of Indonesia’s major coal producers in 2020. At a Petromindo coal and metals outlook conference in late November 2024, coal industry representatives were openly sceptical (indeed outright dismissive in some instances) of the commercial viability of the available coal upgrading technologies and the ability to utilize the same on a large-scale basis.

The new Minister of Energy & Mineral Resources is clearly becoming very impatient with the slow progress of Coal Development & Utilization, repeatedly reminding major coal producers of their legal obligation to carry out Coal Development & Utilization and, as quoted by online news portal Tambang on 13 December 2024, making clear, in very unsubtle terms, that they need to:

“Be careful, PKP2B holders. The main requirement for our PKP2B to extend, one of the requirements is to build down-streaming.”

With, on the one hand, Indonesia’s major coal producers clearly reluctant to pursue Coal Development & Utilization or “down-streaming” alternatives that they have no confidence in being economically viable and, on the other hand, Minister Bahlil Lahadailia insistent that Indonesia’s major coal producers must, nevertheless, carry out Coal Development & Utilization or “down-streaming”, it is not clear how this is going to end for the coal industry or for the new government for that matter in terms of its “down-streaming” goals.

2.2.3 **Copper:** Indonesia has the sixth or seventh largest copper reserves in the world.

The recent completion of Freeport Indonesia’s smelter in Gresik and Aman Minerals’ smelter in West Sumbawa is, of course, being cited by the new government as good examples of what can be achieved, in terms of Metal Minerals DP&R/“down-streaming”, if only the new government ignores the industry “naysayers” and “forges ahead” relentlessly with compulsory and strictly enforced Metal Minerals DP&R/“down-streaming”. The new government may, however, have overlooked the critically important consideration that copper smelting is actually a very unprofitable business owing to a significant world oversupply of copper smelting capacity.

As reported by Bloomberg Technoz on 8 October 2024, participants in the early October annual London Metal Exchange Week series of events reported that a wave of new copper smelter investment in China and elsewhere has left copper smelters around the world competing fiercely for enough copper ore to fill their furnaces. As a consequence, copper smelting fees are projected to fall to US\$20 to US\$40 per tonne in 2025 from US\$100 per tonne in 2015. At even US\$40 per tonne, it is anticipated that copper smelters will struggle

to make a profit in the foreseeable future given that smelters typically make the bulk of their profits from processing fees deducted from the cost of concentrate that they buy from copper ore miners/producers.

At a time when the new government is talking about requiring Freeport Indonesia to build yet another copper smelter in Papua, does it really make sense to create additional copper smelting capacity in a world of copper smelter oversupply? One might reasonably question how building unprofitable and loss-making smelter capacity furthers the realization of an 8% GDP Growth Driver and the achievement of Golden Indonesia 2045. Even if “down-streaming” is a good idea in theory, surely each additional unit of “down-streaming” capacity added has to be profitable or at least not loss making in order to add to the overall economic prosperity of a country.

Even if copper smelting was not itself a very marginal business at best because of smelter industry overcapacity and rapidly falling processing fees, moving from copper concentrate to fully refined copper products (e.g., copper cathodes) only results in an added value uplift of 5% according to Freeport Indonesia. In other words, 95% of the potential maximum added value uplift is actually the result of moving from copper ore to copper concentrate. This is to be compared with a 70% added value uplift for nickel as a result of moving from nickel ore to a fully refined nickel product. Given this value uplift numbers, did it really make good economic sense for Freeport Indonesia (which is at least 51% owned by State-owned enterprises (**BUMNs**)) to invest well in excess of US\$3.7 billion to build a copper smelter in Gresik? How is this in any way consistent with advancing the economic prosperity of all Indonesians and realizing Golden Indonesia 2045?

2.2.4 **Bauxite:** Indonesia is also the country with the 5th largest bauxite reserves in the world and, therefore, seemingly a strong candidate for “down-streaming” as far as the new government is concerned. Yet the reality is that Indonesia’s bauxite production has fallen by nearly 40% since the bauxite ore export ban was made absolute and with no exceptions allowed for companies claiming to be building bauxite/alumina smelters. Indonesia is now only a minor bauxite producer (whereas just a few years ago it was a “top 5” bauxite producer), with local bauxite producers preferring to leave their bauxite reserves “in the ground” rather than invest in expensive bauxite/alumina smelters which they claim are very difficult to get financing for and which they regard as being highly questionable economic propositions.

If the nickel “success” story is so readily applicable to other metal minerals including bauxite, it is surely reasonable to ask why are bauxite producers so reluctant to invest in bauxite/alumina smelters when there are already so many operational nickel smelters and many more nickel smelters in the planning and construction stages? What is it that makes bauxite producers question the economics of bauxite/alumina smelters when nickel producers apparently have no such reservations about the economics of nickel smelters? While it has recently been announced that Indonesia and the United Arab Emirates (**UAE**) have signed a MoU that envisages the UAE building a local large scale alumina facility in cooperation with a BUMN, there is a big difference between signing a MoU and actually making a major capital investment in a local large scale alumina facility – MoUs are easy to sign but implementation of the same often does not eventuate for any number of reasons, including changing perceptions of the associated economics of the subject project. Accordingly, the new government should be cautious in attributing too much significance to the UAE MoU, as evidence of international investor confidence in Indonesia’s much expanded “down-streaming” policy as it relates to bauxite/alumina or at least until such time

as Indonesia actually sees substantial capital investment from UAE in the proposed local large scale alumina facility.

The Indonesian Bauxite and Ore Entrepreneurs Association has been particularly pessimistic about the prospects for additional bauxite or alumina smelters in the near future, pointing out that the average construction progress of bauxite/alumina smelter projects is well under 50% despite several bauxite/alumina smelter projects being supposedly in the planning stage or early construction stage.

SUMMARY & CONCLUSIONS

It is, of course, entirely understandable the new government wants to believe that the nickel “success” story shows the Metal Minerals DP&R policy can be made to work not only in the mining industry and for coal, copper and bauxite as well as for nickel but also in multiple other Natural Resources industries, thereby making a much expanded “down-streaming” policy an obvious choice in achieving the 8% GDP Growth Driver and realizing Golden Indonesia 2045.

While “down-streaming” **could be** the way to go, the very uneven progress of Metal Minerals DP&R after 10 years and the almost non-existent progress of Coal Development & Utilization after 4 years should cause the new government to question just how easy it is going to be to replicate the nickel “success” story across 28 different commodities in 8 different industries.

The new government’s pre-occupation, with the relative size of Indonesia’s reserves of different commodities compared to total world reserves of those commodities and as the key factor in determining suitability of a particular Natural Resources commodity for “down-streaming” prioritization, could be a dangerous over-simplification. Very arguably, the resulting uplift in added value from “down-streaming” and the level of capital investment required for “down-streaming” are equally important determinants of the viability of “down-streaming” in the case of any particular commodity.

More than 10 years ago now, the USAID Study Group, which was responsible for the only comprehensive, publicly available analysis of the economics of the Metal Minerals DP&R policy, concluded that Indonesia’s insistence on Metal Minerals DP&R was hugely “flawed” (**except possibly in the case of nickel for which a plausible Metal Minerals DP&R case might exist**) and likely to result in Indonesia and Indonesians as a whole being worse-off economically, **not** better-off economically, if aggressively pursued by the government. As the USAID Study Group pointed out in its report, the Metal Minerals DP&R policy has its intellectual basis in 1960’s economic thinking and, more particularly, in now discredited “linkage theory” which assumed that, because of high tariff barriers and high transportation costs, a country could only maximize the value of its mineral resources by building its own domestic processing and refining industry. Linkage theory, however, makes little sense in the current age of low tariff barriers and relatively low transportation costs. The previous government has proved that the USAID Study Group was right to identify nickel as the one metal mineral which it might make sense for Indonesia to process and refine domestically. It is to be hoped that the new government does not, with its new and much expanded “down-streaming” policy, inadvertently go on to prove how correct the USAID Study Group also was in dismissing Metal Minerals DP&R for all metal minerals as an almost inevitable “destroyer” of economic value for Indonesia.

Golden Indonesia 2045 is a bold and impressive vision which would, of course, be a wonderful (indeed, near miraculous!!) accomplishment for Indonesia if it can be realized. However, tying the

realization of Golden Indonesia 2045 so closely to a much expanded “down-streaming” policy, covering 28 commodities spread over 8 industries and based solely on the evidence of the nickel “success” story, could prove to be the economic policy equivalent of a desperate gambler, with a huge existing debt shortly coming due, “betting the family farm” on ”red 7” at the roulette table!!!

This article was written by Bill Sullivan, Senior Foreign Counsel with Christian Teo & Partners and Senior Adviser to Stephenson Harwood. Christian Teo & Partners is a Jakarta based, Indonesian law firm and a leader in Indonesian energy, infrastructure and mining law and regulatory practice. Christian Teo & Partners operates in close association with international law firm Stephenson Harwood which has eight offices across Asia, Europe, and the Middle East: Dubai, Hong Kong, London, Paris, Piraeus, Seoul, Shanghai, and Singapore.

Get in touch



Bill Sullivan

T: +62 21 5020 2789

E: bsullivan@cteolaw.com



Christian Teo

T: +62 21 5020 2789

E: cteo@cteolaw.com



Claudius Novabianto

T: +62 21 5020 2789

E: cnbianto@cteolaw.com