

Tura Consulting Indonesia

A Complete Overview



An integrated Mining and Energy Consultant firm in Indonesia

established to deliver various consultancy services in geology & mining, processing-refining, energy & mining policy, strategic management, and mining & metals investment advisory. In associate with Tura Teknologi Informasi (TURATECH).

2020

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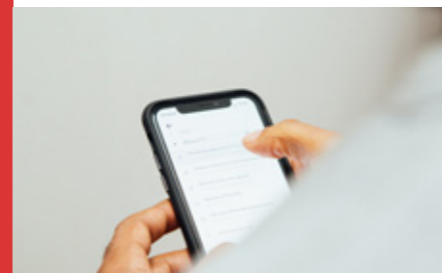
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Greeting from our Founder & CEO

Become an Indonesian Mining and Energy Center of Excellence



Who We Are



Ir. Resvani, M.B.A.
Founder and CEO
Tura Consulting Indonesia

Welcome everyone,

I am the Founder and CEO of Tura Group, Ir. Resvani, M.B.A.

I am delighted to introduce Tura Consulting as part of integrated mining and energy consulting services in Indonesia.

Tura Consulting is a part of Tura Group and also in affiliation with Tura Teknologi Informasi. Tura consulting has an enormous journey and grows along with TURA Group. Since starting this company, it has become clearly that while the mining industry remains an attractive sector, it is entering a period of significant change bringing both challenges and opportunities.

As a professional consulting firm in Indonesia, our commitment is to support sustainable growth of Indonesia mining, intermediate and downstream industry as a whole, especially our emphasis to deliver excellent services with transparency and integrity. Therefore, it is also our purpose to assist government and private industries in optimizing mining roles as a prime mover for sustainable development and also optimizing the used of critical minerals that are considered as significant for future development of renewable technology and energy security.

Align with our vision: Become an Indonesian Mining & Energy Center of Excellence, Tura Consulting always perform its excellent consulting services based on our expertise in Geology, Mining, Metallurgy, Energy, Strategic Management and Financing, including Policy Consultancy services.

Our leadership culture is to drive professionalism, integrity, and solidarity as our foundation in maintaining our value to stay productive and be able in helping people to do more. Therefore, our team are consistently implementing continuous improvement in human capital, technology, and services performance. Also, our dedication to conduct research in energy sectors, perform good corporate governance, strengthen relation and to be synergized with the stakeholders are part of our fundamental principles in running the company. .

We believe that our client and our business will benefit whenever we deliver a better client experience because we strongly believe that value can't always be monetized - it is beyond the price.

Despite the global fast-changing transition of future market and highly competitive environment among mining & energy industries, TURA Consulting will grow into an outstanding leader of mining & energy consulting with increasing brand values and create added value as professional consulting company based on core value and experienced knowledge.

Tura Group has provided technology and consulting services mainly to the geo-mining sector, and currently, we are growing our group to achieve our vision to become the most valuable corporation as an Integrated Mining & Energy business ecosystem.



We understand that our client and our business will **benefit** whenever we deliver a better client experience because we strongly believe that **value** can't always be monetized - it is **beyond the price**.



Tura Consulting Indonesia

is a part of Tura Group and also in affiliation with PT Tura Teknologi Informasi (TURATECH). Tura consulting has an tremendous journey and grows along with Tura Group.

Tura Consulting is an **integrated mining and energy consultant** which born to bring excellent services in geological, mining, processing and refining, economic & policy, including strategic financing, investment, and management.

Our vision is to become an Indonesian Mining and Energy Center of Excellence™ which delivers an excellent value to the mining and energy stakeholders. This commitment is fulfilled by an integrated expert team in several areas which supported by a dedicated research and development team who have international experiences.

In running its business, Tura Consulting always performs good corporate governance, professionalism, and integrity while maintaining an exceptional relationship with customers and stakeholders.



Our Vision

Become an Indonesian Mining and Energy Center of Excellence™



Our Mission

- Deliver excellent services in order to support sustainable growth of Indonesia mining and energy industry
- Assist government and industry in optimizing mining and energy role as a prime mover of development
- Endorse mining and Energy literacy



Our Value

Professionalism, integrity, and solidarity.



Our Strategy

- Continuous improvement in human capital, technology, and services.
- Dedicated research and development team.
- Strengthen relation with the stakeholders
- Perform good corporate governance.



Meet the Team





Our Executives



Ir. Bambang Gatot Ariyono, MM.

Sri Raharjo, M. Eng.Sc.

Strategic Senior Executive

Senior Executive

Core Competencies: Strategic Investment Advisory, Mining and Processing-Refining Regulatory Expert, Business Strategy and Development, Strategic Risk Management, Global and National Stakeholder Relation

Core Competencies: Strategic Mine Operation, Safety, and Environment, Mining 4.0, Digitalization and Automation, Technology Innovation Conceptor, Business Strategy and Development.

Background & Experiences : Bambang Gatot is a former Director General of Mineral and Coal, Ministry of Energy and Mineral Resources 2015 to 2020. In 2014 to 2015, he had position as Minister Expert Staff of Economic and Finance - Ministry of Energy and Mineral Resources, and as Director of Mineral and Coal Business Development in 2008 to 2013.

Background & Experiences : Sri Raharjo is a Former Director of Engineering and Environment (2018-2020). In 2017 to 2018, he had position as Director of Coal Business Development and in 2015-2017, had position as Director of Programme Development for Mineral and Coal.



As part of Tura's strategy in achieving vision of Indonesian Mining and Energy Center of Excellence, our teams - which consists of various expertise experienced in many large national and international companies - will be ready to support you in fulfilling your needs and solving the challenges faced during running your upstream to downstream mining business operation.

Our Commissioners



Ir. Jeffrey Mulyono

Ir. Irawan Poerwo, MBA

Ir. Resvani MBA

Herdian Ganda Wijaya, S.T.

Ir. Satya Graha Soemantri M. Eng.

President Commissioner

Commissioner

Founder and CEO

Chief Operation Officer (COO)

Chief Processing Refining Officer (CPRO)

Core Competencies: Upstream to Downstream of Coal Business and Executing Management; Strategic Mine Operation; Environmental; Community Development; Mining Policy and Regulation.

Core Competencies: Mining Industry Business and Management; Mining Company Strategic Planning; Mining Development Project; Mine Operation and Engineering

Core Competencies: Mining Policy and Regulation; Government, Investor and Stakeholder Relation; Business Strategy and Development

Core Competencies: Mining Engineering; Mining Technology Integration; Fleet Management System, Project Management; Mining Improvement Activity

Core Competencies: Mineral Processing and Refining Expert (Copper, Gold, Nickel, Tin, Iron, Coal, Bauxite, etc); Processing and Refining Plant (Design, Feasibility Study, Construction, Production, Technology, Management, and Policy)

Background & Experiences: President Director of PT Bhakti Energi Persada (EBP) & PT Pesona Khatulistiwa Nusantara (2007 – 2016), President Director of PT Berau Coal (1997 – 2006) Construction of The Coal Power Plant as Project Owner (PT Berau Coal – 2003, & PT Pesona Khatulistiwa Nusantara – 2016) Indonesian Mining Professional Association (PERHAPI) as Chief of Advisory Board

Background & Experiences: Irawan Poerwo graduated from Institut Teknologi Bandung (ITB) as Mining Engineer in February 1974. He also holds Distance Learning MBA from Leicester University, UK intake of 1992. In 1995, he attended PMD, Program for Management Development from Harvard Business School, Boston USA. After that, in 2003 he also registered at LEMHANAS KSA XI (Indonesia National Defence Course) in Jakarta.

Background & Experiences: Resvani obtained his Master Business Administration (cumlaude honour) and Mining Engineering Degree from Institut Teknologi Bandung (ITB). His thesis' title was 'A New Concept of Indonesia Mining Management in order to Optimize Benefit for The State as The Owner of Natural Resources'. This thesis has been presented in International Conference on Management In Emerging Market (ICMEM) and published in international journal. Whereas, his final project described the determination of correction factors for shovel production formula in non-ideal loading condition such as different side loading, broken muck boulder, and loading face condition at Grasberg Open Pit Mine at PT Freeport Indonesia.

Background & Experiences: Herdian obtained his bachelor degree from Bandung Institut of Technology with final thesis about the evaluation of PT Aneka Tambang's performances using financial ratio. His professional career was started in 2008 as short term and mid term engineer in PT Kaltim Prima Coal (KPC). He also got responsibility in handling CDR (Civil, Drainage, and Rehabilitation) and some other projects. Then, he widened his scope as drill and blast engineer in Mining Service Department. After that, he became mining engineer, then senior mining engineer, in Mine Control and Dispatch Section of KPC. He also has capability in programming and operating system.

Background & Experiences : Satya holds his Master Degree of Metallurgical Engineering from University of Wollongong and he graduated his Bachelor Degree in Metallurgy from Institut Teknologi Bandung. Having thirty years of his industrial experience was started as an engineer, manager, until director and commissioner in several nation wide corporation. At present, he is still active as Executive Director at PT. Jogja Magasa Iron, as Advisory Team of National Industrial Development Master Plan at Mining Industry, as Group Leader of Advisory Team at PERHAPI, as Commissioner at PT Sumber Baja Prima, and President Director at PT Benefisiensi Mineral Utama.



Dr. Eng Salmawati, S.T., M.T.
Senior Mine Environmental Engineer

Core Competencies: Mine Environmental; ARD/AMD Management; CO2 Monitoring System; Surface Gas Flux Monitoring

Background & Experiences: She finished her bachelor and master study in Mining Engineering, Bandung Institute of Technology. And she continued her doctoral study in Kyushu University. She has conducted several research related to mining and environment. Two of them are "Study of Opportunities and Challenges to Promote Development of a Domestic Supply Chain to Support Growth of Renewables in Indonesia: The Role of Mining & Mineral Processing Sector" and "Development of Natural CO2 Emission/Flux Monitoring System".



Muhammad Ilham Pasha, S.T., M.Sc.
Senior Mine Plan and Management Expert;
Senior Renewable Energy Analyst

Core Competencies: Renewable Energy and Resources Management; Mine Planning and Operation; Technology Innovation for Energy Efficiency and Conservation

Background and Experiences: Ilham is a professional who has expertise that specialized in the mining industries and renewable energy sectors. He obtained his master degree in Energy and Resources Management from University College London (UCL), Australia, and holds his bachelor degree in Mining Engineering from Institut Teknologi Bandung.

His professional career started as a mine engineer in mining contractor (i.e. THIESS) and continued climbing his career ladder through coal mining companies and consultant. Additionally, he had also established his own mining consultant prior to undertake his master degree, which specialized in mine feasibility study. Having more than five years experiences of engaging in the industry of non-renewable energy, he was then motivated to broaden his scope of knowledge by studying overseas in order to anticipate the dynamical changes of industrial transition in energy sectors.



Dede Rismunandar, S.T.
Principal Geologist

Core Competencies: Mine Data Analyst; Mining Exploration; Resource and Reserve Estimation; Mine Planning; Geological Modeling

Background & Experiences: He was graduated from Geological Engineering, Bandung Institute of Technology. He started his professional work as Exploration Engineer in PT. Nusantara Jaya Persada from 2001 to 2006. After that he became mine engineer (quality engineer and pit geologist) in PT Anugerah Bara Kaltim, Site Lojanaan Kaltim, between 2006 and 2008. Between 2008 and 2017, he became Senior Engineer in several mining companies, such as PT. Nusantara Termal Coal, Site Muara Bungo Jambi (2008 – 2011), PT. Global Multi Energi, Site Misim Tabalong South Kalimantan (2011 – 2012), PT. Bara Adhipratama (2012 – 2013), and PT Metro Energy - PT Tadjahan Antang Mineral Mine Site in Kualakurun Gunung Mas Regency Central Kalimantan (2013 – 2017). From 2017 – 2018, he became Freelance Geologist Associate in several companies, such as PT. Wijaya Karya Bitumen, PT. Raja Kutai Baru Makmur, PT. Skyland Energy Power, and PT. Satya Mitra Persada.



Fathul Jannah, S.T., M.T.
Senior Mine Economics Analyst

Core Competencies: Renewable energy, Mineral Market Analysis, Economic Forecasting, Mineral & Energy; Economics and Regulator Analysis

Background & Experiences: Fathul graduated from Institute Technology of Bandung (ITB) with a master degree in Management and Economics of minerals and coals. Her involvement, further cultivated her capacity as an expert economic analysis capable of utilizing multiple tools, complimented by her expertise and knowledge in renewable energies, mineral market analysis (global and domestic), economic forecasting, mineral & energy economics and regulator analysis.

She continued developing her capacity through her Master Thesis, "A Dynamic System Model of Domestic Tin Industry Chain" to enhance the economic impact of value-added in Indonesia. She formed policy structure related to the development of supporting and in-between industries along domestic tin supply chain. The policy structure can predict the added value of domestic tin industry which allows the commodity to maximize its benefit for Government of Indonesia.



Rahmat Hidayat, S.T.
Senior Mine Analyst

Core Competencies: Data Analyst; Mining Engineering and Operation

Background & Experiences: Rahmat is a mining engineering Graduate from Institut Teknologi Bandung. His interest in data analytics makes him solve operational problem quickly with data. As an internee in 2016, he had conducted production analysis in PT Newmont Nusa Tenggara. In 2017, he did a study with Phase2 to analyse regarding underground geotechnical stability.

He had experience in PT Berau Coal as a mining engineer and data analyst. He performed an improvement in regard to report coal productions along with production activities supervision.



Erika, S.T.
Geologist; Geostatistician;
Geotechnical and Hidrology Engineer

Core Competencies: Geostatistics; Mining Exploration; Resource and Reserve Estimation

Background & Experiences: Erika is very interested in basic statistics, geostatistics and exploration. During her internship in geology department of PT Adaro Indonesia in the 2016, she did a small research about drill hole spacing determination by using geocoal software, a geostatistics software issued by Australian Coal Association Research Program (ACARP). She is also interested in application of JORC and KCGMI code in resources-reserves estimation. She did another research for her undergraduate thesis that comparing the application of geostatistics and conventional method in resources estimation. The thesis was published as a part of TPT XXVI PERHAPI Prising.



Harun Nuruddin Akbar, S.T.
Mine Plan and Resource Estimation Engineer

Core Competencies: Mining Engineering; Mining Improvement Activity

Background and Experiences: Harun obtained his Bachelor Degree in Earth Resources Exploration, Mining Engineering, from Institut Teknologi Bandung (ITB) in July, 2017

Harun is very interested in coal mining. In 2016, he had internship program at PT Kaltim Prima Coal and he did small research about comprehend coal mining business process. His undergraduate study final project in 2017 was about artificial maturation study of coal based on variation of temperature and time. He experienced in coal mine engineer at PT Pada Idi in 2017-2018. His duties consisted of day to day monitor contractor's activities, review contractor's short term plan (daily and weekly plan), and evaluate contractor performance.



Hanif Ikhsan Pratama, S.T., M.T.
Senior Mine Economics and Senior Energy
Policy Analyst; Supply Chain and Market Analyst

Core Competencies: Coal and Mineral Economics; Energy Economics; Supply Chain Optimization; Mine Planning; Rock Blasting; Renewable Energy

Background and Experiences: Hanif holds his Bachelor Degree in Mining Engineering from Institut Teknologi Bandung in 2014 and his Master Degree in Coal and Mineral Economics from the same college in 2016. His undergraduate study final project was about stripping ratio optimization on an open pit coal mine using the discounted cash flow method. And, his master thesis was about location modelling of coal blending facilities in Indonesia.

During college years in undergraduate study, he accomplished some achievements such as full time (eight semesters) scholarship from South Sumatera government and became part of ITB team in winning the Grand Champion Title of 9th Indonesian Student Mining Competition (ISMC 9th) event. During college years in postgraduate study, he was selected as Mining Engineering ITB representative of student exchange program in Philippines and Japan. He also got a full-time scholarship (four semesters) for his master study from ITB.



Irvan Aji Pratama, S.T.
Senior Pyrometallurgist;
Senior Financial Expert

Core Competencies: Pyrometallurgy; Mineral Processing; Plant Commissioning and Operation

Background and Experiences: Irvan holds his Bachelor Degree in Metallurgical Engineering from Institut Teknologi Bandung in 2011. His undergraduate study final project was about Dynamic Model for Prediction of Liquid Metal and Slag Stopping during Ferronickel Refining in LD-Converter. He experienced in making material and heat balance simulation, simulation of project economic, and plant design, and feasibility study based on mineral characteristic for iron and steel making plant project (in Solok, Jambi, and Sukabumi), gold plant project (Sukabumi), ferronickel plant project (Maluku), Nusantara Smelter Corporation-Copper Smelter Plant (Review Feasibility Study), coal plant project (Kalimantan). He involved in commissioning mineral processing plant such as Jogja Magasa Iron (Kulonprogo), copper flotation plant (Solok), and re-commissioning sponge iron plant (Sukabumi).



Fikri Irsyad, S.T.
Senior Hydrometallurgist;
Senior Mineral Policy Analyst

Core Competencies: Mineral Policy; Mineral Economics and Market; Hydrometallurgy

Background & Experiences: Fikri holds his Bachelor Degree in Metallurgical Engineering from Institut Teknologi Bandung in 2011. In 2009 he had internship program in PT Timah Tbk in 2009 and did small research about recovery of rare earth mineral from tailing of tin mineral processing. His undergraduate study final project was about nickel laterite extraction using hydrochloric acid with various salt addition.

He experienced in making plant design and feasibility study based on mineral characteristic for wide variation mineral commodities such as gold, nickel, tin, alumina, coal, copper, iron, lead and zinc. Work in wide variation of mineral processing projects shaped his knowledge and skill to be a good metallurgist consultant.



Muhammad Iqbal Tawakkal, S.T.
Metallurgist

Core Competency: Metallurgical Engineering

Background & Experiences: Iqbal holds his Bachelor Degree in Metallurgical Engineering from Institut Teknologi Bandung in 2017. His undergraduate study final project was about Effect of Potential on Corrosion Behavior of Tartaric-sulfuric Acid Anodized 7075 T6 Aluminum Alloys that was published by Institute of Physics in 2017.

In December 2015 - January 2016, he had internship in PT Timah (Persero), Tbk, Metallurgical Unit, Muntok, Bangka Barat, Kepulauan Bangka Belitung. His professional career started as project controller in PT Melu Bangun Weweka in 2018-2019. In the same year, he became a personal assistant of Natural Resource Downstreaming expert in Ministry of Industry, Dr. Raden Sukhyar.



Syani Liffa Suci, S.T.
Mine Engineer

Core Competency: Mine Engineering; Mine Drainage Analysis; Geotechnical Analysis

Background & Experiences: Syani holds her bachelor degree in Mining Engineering from Institut Teknologi Bandung in 2019. Her undergraduate's final project was "Effect of Cyclic Loading on the Change of Rock Strength". She did a small research in the Laboratorium of Geomechanics and Mining Equipment, Bandung Institute of Technology. Syani had experiences as internship in PT Cipta Kridatama, Kalimantan Timur, she observed how mining companies operate their mine drainage systems. She really interested in geotechnical analysis, mine drainage analysis, and mine-planning.



Antonius Sony Yuswanto, S.Psi
Senior Human Resource Expert

Core Competency: Organization Development, Employee assessment, People Development, Industrial Relations, Recruitment, Human Resources Information System, Coaching and Counselling, External Relations, Community Development, SAP Procurement Program

Background & Experiences: Sony obtained his bachelor degree from Psychology Faculty, Surabaya University in 2007. Sony is a professional who has expertise that specialized in human resources area. Since 2004 he was start working at psychology service consultant as a psychological tester and counselor assistant.

He experienced in organization development, employee assessment, people development, industrial relations, recruitment, human resources information system, coaching and counselling, external relations, community development, and procurement using SAP program in many business industries like nickel mining, coal mining, oil & gas, manufacturing, consumer goods industry, and fishing industry.

He also concern about human resources or human capital to be business partner in working environment and develop a mutually beneficial work culture between company and labor.

Our Associates (1/4)



Arie Naftali Hawu Hede, S.T., M.T.,
Ph.D.
Principal Exploration

Core Competencies: Resource and Reserve Estimation; Coal and Mineral Deposit; Geochemical; Hydrothermal; Remote Sensing Mineral Exploration; Feasibility Study

Background & Experiences: His eight years of professional experience started as research assistant in Research Group of Earth Resources Exploration ITB then academic assistant in the same group and at present he works as lecturer in Mining Engineering ITB. He involved in many projects such as team member in study for the continuity of the joint operating agreement between PT Awang Sejahtera and PT PLN Batubara in cooperation with LAPI ITB in 2016, and also as team member in due diligence study for resources and reserves estimation PT Sarana Karya, Buton Island, funded by PT Wijaya Karya in cooperation with LAPI ITB in 2012.



Dr. Chairul Nas (M.AusIMM)
Principal Exploration
and Resource Estimation

Core Competencies: Competent Person - Resource (Coal); Coal Quality and Reserve Assessment; Coal Geology; Coal Exploration; Project Facilitation

Background & Experiences: He got his bachelor degree in Geology Department, ITB. And then he got his Masters and PhD in Coal Geology from Wollongong University NSW Australia. He has an expertise in Coal Geology, Coal Exploration, and Coal Resource Assessments. He is now a Competent Person Indonesia certified by Indonesian Association of Geologists (IAGI). He is also a Competent Person of AusIMM (Australasian Institute of Mining and Metallurgy). At present, he works as lecturer in Mining Engineering, Trisakti University.



Lely Herlina, S.T., P.Eng.

Mine Planning, Mine Production Analyst and Project Specialist

Core Competencies: Open Pit Mine Design, Production scheduling and Strategic Planning (Short and Long Range), Waste and Stockpile Storage Facility Design and sequencing, Mine Equipment evaluation, selection, and fleet requirement estimation, Mine Capital and Operating Cost estimation

Background & Experiences: She is Certified Professional Mine Engineer P.Eng. with 19+ years of experience specialized in Mine Planning, Mine Production Analyst and Project Specialist..



Prof.Dr.Ir. Sudarto Notosiswoyo,
M.Eng
Principal Hydrogeology

Core Competencies: Hydrogeology; Mining Exploration; Environmental Geology; Hydrochemistry; Groundwater; Minerals

Background & Experiences: He received his engineer degree from Mining Exploration Option, Mining Engineering department, Bandung Institute of Technology. After that, he continued his master study in Geological Engineering, Asian Institute of Technology, Bangkok. And he got his doctoral degree in Hydrogeology major, RWTH Aachen. He was a lecturer in Mining Engineering department, Bandung Institute of Technology. He has been involved in many research projects and publications, especially those related to mining, exploration, geology, and hydrogeology.



Irwan Iskandar, S.T., M.T., Ph.D.
Principal Hydrology

Core Competencies: Mining Exploration; Hydrogeology and Hydrogeochemistry; Hydrogeological Modeling; Groundwater Engineering; Water Resources; Environmental Impact Assessment; Environmental Geochemistry

Background & Experiences: He received his bachelor from Mining Exploration Option, Mining Engineering department, Bandung Institute of Technology. After that, he continued his master study in Hydrogeology major, Bandung Institute of Technology. He got his doctoral degree in Hydrogeology major, Kumamoto University. He is currently a lecturer in Mining Engineering department, Bandung Institute of Technology. He has been involved in many research projects and publications, especially those related to mining, exploration, geology, and hydrogeology.



Berry Casanova, S.T., M.T.
Geotechnical and Hydrology
Hydrogeology Expert

Core Competencies: Geotechnical Engineering; Hydrology and Hydrogeology; Mine Drainage; Groundwater Mapping

Background & Experiences: He got his bachelor degree in Mining Engineering, Bandung Institute of Technology. After that, he continued his education in Hydrogeology Master Program, Bandung Institute of Technology. His professional experience was started in 2008 as geomodel department head in PT Stargate Resources. Then, in 2009 he became technical control in PT Reka Bumi. In 2004, he take the role of Director in PT Reka Bumi. From 2018, he became the geotechnical, hydrology and hydrogeology expert of PT Tura Consulting Indonesia.



Hendrik A. Saputro, S.T. (M.AusIMM)
Competent Person JORC/ KCMII
- Coal Reserves

Core Competencies: Coal Mining; Mine Planning; Surface Mining; Feasibility Study; Business Development, Geology

Background & Experiences: He received his bachelor degree from Mining Engineering Department, Bandung Institute of Technology. He commenced his professional work as Mining Engineer in Mine Planning Department, PT Kaltim Proma Coal. After that, he became Deputy Engineering Superintendent in PT Thiess Contractor Indonesia. Then, he started his experience as mining consultant in PT Britmindo. In 2015, he decided to be independent professional advisor. He was registered as Indonesian Competent Person of Perhapi (CPI - Perhapi) and also as the member of the Australasian Institute of Mining and Metallurgy (MAusIMM). He also has Pengawas Tambang Madya (PPTM) certification.



Dr. Asep Bahtiar, S.T., M.T.
Geological Modelling
and Coal Infrastructure Expert

Core Competencies: Mine Safety and Infrastructure Expert

Background & Experiences: He got his Bachelor and Master Degree in Geological Engineering, Padjadjaran University and Mining Engineering, Earth Resources Exploration ITB respectively. After that, he continued his doctoral study to Geological Engineering, Padjadjaran University. He has broad experience in geology, mining, mine safety and also infrastructure.



Dr. Masagus Ahmad Azizi, S.T., M.T.
Principal Geotechnical Engineer

Core Competencies: Geotechnical Engineering

Background & Experiences: He received his bachelor degree from Mining Engineering Department, Sriwijaya University. After that, he received his master and doctoral degree in Mining Engineering, Bandung Institute of Technology. At present, he works as lecturer in Mining Engineering, Trisakti University. Besides, since 2017, he also plays role as License and Competency Assessor in Professional Certification Agency (LSP) of PERHAPI.



Muhammad Nuer Rahman, S.T.
Drilling and Blasting;
Numerical Modelling Expert

Core Competencies: Drilling and Blasting Expert; Mine Planning, Scheduling and Operation; Numerical Modeling and Engineering

Background & Experiences: Nuer holds Bachelor Degree in Mining Engineering from Institut Teknologi Bandung with thesis about analysis underground stability due to blasting activity using back analysis (boundary element method). He started his career in 2006 as drill and blast engineer at PT Freeport Indonesia, a subsidiary of Freeport McMoran.

Nuer widened his scope as Technical Engineer in explosives and blasting all across Indonesia being involved in first project of AEL Mining Services in Indonesia as Technical Services Engineer. Nuer joined Rio Tinto Iron Ore Australia in 2011 as Drill and Blast Engineer where he involved in blast optimisation project such as increased blast size, pattern expansion, powder factor reduction.



Rosnila, S.Si., M.Si.
Mine Environmental
and Community Development Expert

Core Competencies: Mine Environmental & Community Development Expert

Background & Experiences: She received her bachelor degree from Biology Major, Andalas University. After that, she continued her education to the Natural Resources and Environmental Management Study Program, Graduate School IPB. As professional experience, she has been involved in many environmental related projects as environmental expert, such as Strategic Environmental Studies for Regional Spatial Planning (RTRW) for South Tangerang. Currently, she is a lecturer in Akademi Kimia Analis for Biology, Environmental Sanitation, IPAL Management Planning, Environmental Biotechnology, and Solid Waste and Hazardous Waste Material Management.

Our Associates ^(3/4)



Dr-Ing. Zulfiadi Zulhan, S.T. M.T.

Principal Pyrometallurgy

Core Competencies: Modeling and Simulation Metals Processing; Ironmaking; Steelmaking; Stainless Steelmaking; Vacuum Metallurgy and Refining Plants; Tin Smelting and Refining; Non-ferrous High Temperature Metals Processing

Background & Experiences: His twenty years of professional experience is wide ranging as metallurgist at Siemens VAI Metals Technologies GmbH Germany, researcher at Institute for Ferrous Metallurgy, RWTH Aachen University, Germany, and now, as academic staff in Metallurgical Engineering Institut Teknologi Bandung. His industrial experiences formed in local and abroad such as layout of new integrated steel plant at PT Krakatau Steel in Indonesia, modernization and optimization of ferronickel plant at PT Antam in Indonesia, hot commissioning of 180t single RH plant at Shougang Steel Plant in Zhang Jiagang-China, study of splashing behavior of Conarc (Converter-Arcing) process at Dolvi ISPAT Steel Plant in India, and many others.



Prof. Dr. mont. M. Zaki Mubarak, S.T. M.T.

Principal Hydrometallurgy

Core Competencies: Hydro-electrometallurgy; Hydrometallurgical Extraction and Refining (Gold, Nickel, Alumina, Copper, Anode Slime, etc.); Nickel-Cobalt Separation; Electrolysis

Background & Experiences: He got his bachelor and master degree from Mining Engineering, Bandung Institute of Technology. After that, he continued his doctoral study in Department of Nonferrous Metallurgy, University of Leoben, Austria. At present, he works as lecturer in Metallurgy Department, Bandung Institute of Technology.



Yoseph Swamidharma, B.Sc, M.Sc, DIC (M.AusIMM)

Principal Mining Development and Geometallurgy

Core Competencies: Mineral Exploration; Mining Development; Geology; CPHAGI; CPI-KCM

Background & Experiences: He got his bachelor degree from Geology major. After that, he continued his education to pursue the degree of MSc & DIC in Imperial College London, UK. In his professional career, he took part as Head of Indonesian Mineral Mining Division in Indonesian Conglomerate Group and also its subsidiaries in Australasia, where he discovered and developed CRM projects. Prior to these assignments, he engaged in various roles in exploration, project development, mine operation and consulting for tier-1s in Australasia, Europe-Middle East-Africa and North America. He was also appointed as Committee Head of Kode KCM in Indonesian Economic Geology (MGEI) in 2013, subsequently appointed as Public Policy Division member in Indonesian Association of Geologists (IAGI) and as Indonesian Representative for CRIRSCO since 2017, then assigned as member EGRC-UNECE since 2018.



Nuzulul Haq, S.T., M.M.

Principa Financial, Strategy, Tax and Accounting

Core Competencies: Strategic Planning Analysis; Asset Portfolio and Optimization Study; Econometric Forecasting Modelling; Risk Analysis; Real Options or Market Base Valuation; Project Economics; Acquisition and Divestment Project

Background & Experiences: Nuzulul got his bachelor degree of Metallurgical Engineering, Bandung Institute of Technology in 1996. He continued his master study in Financial Management Program, Faculty of Economics, University of Indonesia. His thesis title is 'An Error Correction Model for Forecasting Changes in minas Spot Price and Its Application in Cross Hedging Strategy on Futures Contract' that employs business analysis, including economic modelling with vector error correction mechanism (VECM), forecasting, and strategic planning in hedging.

He is involved in some professional membership, namely Investment Manager Representative License from BAPEPAM (Indonesian Security Exchange Committee) and also a member of Indonesian Petroleum Association. He is Certified Risk Analyst (CRA) holder from the American Academy of Financial Management (AAFM) and Certified Risk Management (CRM) holder from the International Institute of Professional Education and Research (IIPER).



Fardi Baharuddin S.E.

Principal Financial Strategy, Tax and Accounting

Core Competencies: Financial Strategy; Tax and Accounting

Background and Experiences: He received his bachelor degree from Faculty of Economy, Majoring in Accounting, University of Sumatera Utara. His working experience was started in 1981 as Auditing Staff in KAP Utomo, Mulla & Co. After that, he continued his professional experience as internal audit and accounting supervisor in several other companies. In 1997, he became the finance and accounting director in Mekasindo Dharma International, a heavy equipment distributor. In 2005, he became a Project Development Director in a palm plantation project of Mulia Permata group. In 2008, he became a Director in PT Benefisiasi Mineral Utama. Currently, he became an associate in mining business and management of PT Tura Consulting Indonesia.



Jane Christina Stefanie, B.A., M.B.A.

Market Analyst and Marketing Strategy Expert

Core Competencies: Management System; Corporate Management System; Market Analysis and Marketing Strategy

Background & Experiences: Jane got her Master of Business Administration from Bandung Institute of Technology with a 4.0 GPA and Bachelor (Honors) of Arts from Curtin University of Technology, Australia. Then, she also obtained Advance Diploma in Interior Design from Raffles Design Institute. Generally, she experienced in delivering some multidisciplinary business projects worth hundred billion rupiahs. The area of the project includes construction and telecommunication. For instance, currently, she has been appointed by PT Sinar Expo to do some duties that consist of executing financial restructuring project that reduce the expense by 40%, composing management system and integrated marketing strategy for Balikpapan's Oil, Gas, and Mining International Expo.



Dr. Ir. Surya Darma, MBA

Renewable Energy Expert, Geothermal Exploration & Operation Expert

Core Competencies: Renewable Energy Technology, Geothermal Exploration & Operation

Background & Experiences: He was getting his bachelor degree from Geology department, Bandung Institute of Technology. He continued his study to Energy Technology major, University of Auckland. After that, he pursued his MBA and doctoral degree from Kennedy Western University. During his career, he has been involved in many project and research which is related to renewable energy. He also received an award from New Zealand government for his role in strengthen diplomatic relation between Indonesia and New Zealand through renewable energy, especially geothermal. He is currently the leader of Indonesian Renewable Energy Society (IRES/METI).



Ir. Chairul Hudaya, S.T., M.Eng., Ph.D., IPM.

Principal Energy and Power

Core Competencies: Electrical Engineering; Advanced Battery Material Technology; Renewable Energy Technology

Background & Experiences: Hudaya finished his bachelor study of Electrical Engineering, University of Indonesia in 2006. He obtained his master degree of Energy System Engineering from Seoul National University (SNU) in 2009. In 2016, he finished his doctoral study of Energy and Environmental Engineering, University of Science and Technology, Campus, Korea Institute of Science and Technology (USTKIST).

As one of the productive young researchers, he got some awards such as ASEAN Young Scientist and Technologist Award 2017, University of Science and Technology (UST) Overseas Honorary Ambassador for Indonesia, University of Science and Technology (UST) Excellent Award in Research Paper and Korea Institute of Science and Technology (KIST) Excellent Graduate Award.



Didi Kurniadi Halim, S.T., M.B.A.

Corporate Performance Management Expert

Core Competencies: Corporate Performance Management; Business Strategy and Marketing; Risk Management Analysis

Background and Experience: He has master degree in Business Administration. From 2012 until present, he works as Professional Consultant. His main activities in consulting services were helping companies or organizations to define and improve performance management based on business process. Besides, he was also involved in a Pra-Feasibility Study Project of a company aimed at complying the requirement of Ministry of Energy and Mineral Resources.

Our Associates ^(4/4)



What We Do





Our Services

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Geology and Mining Services

In the current global mining business circumstance, resource and reserve data accuracy is a must for every business transaction as well as government reporting obligation. In order to fulfill such requisite, our technical team and the Competent Person will assist clients in resources and reserves estimation with the internationally recognized guidelines, KCM1 Code 2017 and JORC Code 2012

Mining is a unique business, mainly due to its natural uncertainty associated with various technical factors such as the presence of different ore types, natural variability in orebody geometry and grade, etc coupled with economic factors such as volatility of commodity prices. These make the growing importance of technical and economic assessment in mining compare to other business in terms of minimizing risks.



Scoping / Desktop Study and Due Diligence

GM-01

Deliverables

1. Scoping / desktop study
2. Due diligence report

Duration

+2
months

Mining industry is known as a 'high risk, high return' business. Therefore, we understand that Due Diligence and Desk Study Practice are needed in order to minimize the future risk for the mining investors and stakeholders.

Due Diligence is an investigation process on a potential mining project. While Desk Study is an evaluation activity of a mining company based on secondary data. In these sub-services, we conduct a project assessment and risk identification within technical, economical and legal aspect. Based on the result, we deliver recommendation for decision making process.

Scope

1. Scoping / desktop study:
 - Conduct site visits, sampling, and laboratory test (when necessary)
 - Data collection and literature study
 - Conduct legal review, technical (geological and preliminary exploration), and database review
 - Evaluate operational and existing infrastructure (in case brown field)
 - Evaluate modifying factors that related to mining development
 - General technical assessment of geology, mining, infrastructure, economics, and risk analysis and mitigation plans
 - General techno-economic study
2. Due diligence:
 - Select the mining prospects that will be obtained
 - Communicate with respected contacts and provide study results about prospective mines
 - Conduct additional literature review
 - Provide key administrative information and brief economical evaluation of prospective mines
 - Manage prospective mines database

Exploration Management and Supervision

GM-02

Deliverables

Exploration Supervision report

Duration

Depend on
the area size and
method chosen

This service offers complete exploration management service comprising planning, supervision, data collection, management and reporting. The careful design and management of an exploration project is critical to ensure your capital is well spent on effective exploration activities. Nevertheless, in case you just require skilled field personnel, we can offer contract staff to assist your team. Overall, the service involves an excellence management and field supervisory that encompass exploration best practice according to JORC and KCMI reporting codes.

Scope

- Geological mapping
- Exploration drilling and supervision
- Customized standard operating procedures (SOP) and training
- Geophysical logging
- Core handling and sampling
- Collar survey
- Management of exploration database
- Statistical and Geostatistical analysis

Topography Mapping

GM-03

Deliverables

- Topography survey report:
- topography map and contour plot
 - softcopy data (ArcGis /ArcVIEW or AutoCad Map, Geotiff, PDF),
 - documentation

Duration

Depend on
the area size and
method chosen

This service offers a topographical survey that consists of collecting data in the field to deliver a representation at the desired scale in the form of a topographical map. Clients can use topographic surveys to determine and plan features such as drainage ditches, grading, or other features, using the natural landscape as the basis for such improvements. Basically, the service aims to undertake basic mapping of selected prospective areas within geologically endowed regions.

Scope

Method

- Terrestrial method (ground survey mapping), instrument:
 - Total station,
 - Waterpass,
 - Drone,
 - Theodolite,
 - Measuring stick, and
 - Other essential equipment
- Photogrammetry & aerial method, instrument:
 - Drone UAV
 - Benchmark / control point
 - Other essential equipment

Marine Survey

GM-04

Deliverables

- Marine survey report:
- bathymetric map and contour plot
 - softcopy data (ArcGis /ArcVIEW or AutoCad Map, Geotiff, PDF),
 - documentation

Duration

Depend on
the area size and
method chosen

This service offers marine survey that consists of collecting data in the field to deliver a representation at the desired scale in the form of a bathymetrical map. Clients can use the data to determine and plan features using the natural landscape as the basis for such improvements, such as construction of submarine pipeline. Basically, the service aims to undertake basic mapping of selected prospective areas which projects will be constructed or/and developed.

Scope

- Bathymetric Survey,
- Sub-Bottom Profiling (SBP) Survey,
- Side Scan Sonar Survey,
- Marine Magnetic Survey,
- Ocean Current Survey,
- Sea Waves Survey,
- Tidal Survey,
- Wind Survey (Meteorology),
- Sea Water Quality (salinity, temperature, water samples, sediment, etc).



Geotechnical, Hydrology and Hydrogeology Study and Supervision

GM-05

Deliverables

Geotechnical, hydrology and hydrogeology study report

Duration

+3
months

Geotechnical, hydrology and hydrogeology aspect are important things that must be considered related to technical, economic, environmental and safety issues. The potentially hazardous nature requires the application of geotechnical engineering practice to mine design and general operating procedures, to allow safe and economic mining of any commodity within any failure. A large amount of water may flow into the mining operation area, which may then affect heavy equipment performance, workplace conditions, and productivity of mine, amongst other factors. This service provides a guidance and supervise the geotechnical, hydrology and hydrogeological survey activities. Our team also manages to transfer the understanding thoroughly regarding good survey practice, deliver strategies and recommendation, and more importantly, to comply with applicable standard. We also affiliate with drilling services companies and laboratories to meet a broad spectrum of geotechnical needs.

Scope

1. Geotechnical field works and study: Total station,
 - Geotechnical drill hole work plan
 - Core handling and sampling
 - Physical & mechanical properties lab test* (e.g. hardness, specific gravity, permeability, porosity, sonic velocity, UCS, direct shear strength, etc.)
 - Conduct geotechnical drilling supervision / training
 - Geotechnical analysis and model simulation (i.e. safety factor)
 - Design recommendation
2. Hydrology – hydrogeology field work and study:
 - Observe existing morphology and hydrology condition
 - Hydrology-Hydrogeology supervision / training
 - Hydrology-hydrogeology survey & data collection (e.g. Climatology, hydrometric activity, slug test, river mapping, V notch weir, in-situ permeability test, infiltration test, etc.)
 - Analysis, modelling, and recommendation (e.g. surface water catchment and watershed, statistical analysis, rainfall distribution and intensity analysis, identify hydrostratigraphy, hydrograph, water quality analysis, drainage system recommendation, etc.)

Feasibility Study for Mining

GM-06

Deliverables

Feasibility Study Report

Duration

+4
months

The feasibility study report is one of the requirements to obtain a Production Operation IUP/IUPK from the Ministry of Energy and Mineral Resources. The FS document contains information related to the number of Resources and reserves as well as annual production capacity in order to obtain an estimated mine life. Report made refer to Minister of Energy and Mineral Resources (MEMR) No. 11 of 2018 and MEMR No. 1806K/30/MEM/2018.

Scope

- General condition review
- Geological and deposit review
- Resources and reserves statement review
- Geotechnical, hydrology, and hydrogeology analysis review
- Mine planning study
- Processing planning study
- Mine infrastructure study
- Environmental and safety review
- Community development review
- Manpower and organization
- Marketing
- Economical evaluation
- Investment feasibility analysis

KCMI 2017 / JORC 2012 Resource Estimation and Audits/ Review for Mining

GM-07

Deliverables

1. KCMI 2017 / JORC 2012 Resource statement report
2. KCMI 2017 / JORC 2012 Resources Audit/Review Report

Duration

+3
months

This service offers complete exploration management service comprising planning, supervision, data collection, management and reporting. The careful design and management of an exploration project is critical to ensure your capital is well spent on effective exploration activities. Nevertheless, in case you just require skilled field personnel, we can offer contract staff to assist your team. Overall, the service involves an excellence management and field supervisory that encompass exploration best practice according to JORC and KCMI reporting codes.

Scope

- Geological mapping
- Exploration drilling and supervision
- Customized standard operating procedures (SOP) and training
- Geophysical logging
- Core handling and sampling
- Collar survey
- Management of exploration database
- Statistical and Geostatistical analysis

KCMI 2017 / JORC 2012 Reserve Estimation for Mining and Audits/ Review for Mining

GM-08

Deliverables

1. Reserve statement report based on KCMI 2017 / JORC 2012
2. KCMI 2017 / JORC 2012 Reserves Audit/Review Report
3. Pre- feasibility study report based on KCMI / JORC according to Resource and Reserve report

Duration

+4
months

Our team takes account of all the realistically assumed modifying factors, i.e. mining, metallurgical, economic, marketing, legal, environment, social and governmental factor to justify the reserves estimation, the economically mineable part of a measured and/or indicated mineral resources. Reserves estimation complied with KCMI Code and JORC Code principles, is our bottom line.

Scope

1. Reserves statement reporting based on KCMI / JORC
 - Overview of Resources Statement
 - Modifying Factor Assessment (Pre-Feasibility Study)
 - LOM Mine Planning, Optimization, Sequencing & Scheduling
 - Mine Operations & Material Handling
 - Mine Infrastructures overview
 - Mine Environmental, Safety & Health overview
 - Mine Community Development & HR/Organization overview
 - Marketing & Economic Feasibility Evaluation
 - Reserves estimation
 - Report preparation
2. Audit/Review of KCMI / JORC Reserve report
 - Overview of Reserves Statement
 - Modifying Factor Assessment
 - Reserves evaluation
 - Report preparation
3. Pre- feasibility study report based on KCMI / JORC Resource and Reserve report

Mine Engineering and Operations Assistance

GM-09

Deliverables

Performance enhancement and reporting progress which relevant to scope of work as per described in contract

Duration

+6
months
subject to contract extension

Mine engineering and operations assistance is carried out to ensure that mining activities run in accordance with the principles of good mining practice

Scope

- Preparing and implementing standard operating procedure for mine engineering work process
- Optimizing and reconciling work plans/mine plan on a regular basis
- Implementation of functions and scope of work in the engineering department
- Reviewing and compiling a control system for the implementation of mine plan
- Review and preparation of cost control system and data analysis
- Technical direction and supervision of the operation of the contractor and subcontractor
- Implementation of internal team improvement & development to strengthen the competence and quality of engineering department personnel
- The use of an iterative solution approach in providing technical inputs and proposed solutions to technical problems in the field

Drilling and Blasting (D&B) Consultancy

GM-10

Deliverables

1. D&B report comprising model, analysis, design, evaluation, control, documentation, and recommendation to implement D&B activities best practice
2. Pre-feasibility report of D&B

Duration

+6
months
subject to contract extension

Tura Consulting Indonesia operates using a combination of independent blasting engineer, association of specialised D&B expert, associate consultants, and dedicated employed staff. Our aim is to help you in achieving the effectiveness of production activities through subsequent drill and blast activities in the most cost-effective, efficient, and safe manner.

Scope

1. D&B analysis & problem solving:
 - Improvement initiatives for design, implementation, and control of D&B
 - Damage control in blasting through Instrumentation and Process Monitoring
 - Blast Optimization to provide potential cost reduction savings by using specialised techniques as follow:
 - Measurement, modelling, and fragmentation to analyze wear and tear on machinery and to match rock size with the processing equipment;
 - Vibration, air blast monitoring, and flyrock modelling to certify compliance with statutory or site ground vibration and air overpressures limits;
 - Analysis and review of perimeter control to ensure that blast damage, overbreak and ground support is kept to a minimum; and
 - A dilution study to maximise production by examining blast sequencing and selective digging techniques.
2. D&B pre-feasibility study – Focus on providing key information that allows dimensioning the requirements of the Mine regarding investment decisions and operating costs in relation to the impact fragmentation resulting from blasting (such as productivity of loader, fill factor on trucks, cycle times, etc.) without losing sight of the importance to achieve a sustainable mine design in correspond to geotechnical recommendation. The study that will be developed are summarized as follow:
 - Data collection & analysis for information base;
 - Technical analysis for: D&B designs plan, and modelling for fragmentation prediction;
 - Dimensioning of Equipment.
 - Economic Assessment

Activities and Budget Plan (RKAB) for Government Report Compliance

GM-11

Deliverables

1. RKAB document and presentation materials
2. RKAB realization document (quarterly)

Duration

1. Preparation of RKAB document (annual plan): ± 3 months
2. RKAB realization report (quarterly): ± 1 months

This service offers the preparation of a Work and Budget Plan document (RKAB), which required for permits approval for other regulated activity in order to fulfill the Ministry of Energy and Mineral Resources (MEMR) Regulation No. 11 / 2018 and MEMR Decree No. 1806K/MEM/2018, mining companies/the mining license holders should prepare the RKAB Document (Rencana Kerja Anggaran dan Biaya, or Work and Budget Plan) and submit it to MEMR.

Scope

1. Preparation of RKAB Report (annual plan)
 - Document Preparation
 - Assistance during Document submission, presentation (pleno meeting), revisions and approval process from MEMR.
2. RKAB Realization Report (quarterly report)
 - Document Preparation
 - Assistance during Document submission.

Environmental and Social Report for Government Compliance

GM-12

Deliverables

1. Reclamation plan document
2. Mine closure plan document
3. Water management study and report document
4. RIPPM document

Duration

1. Reclamation Plan: ± 2 months
2. Mine Closure Plan: ± 3 month
3. Water management monitoring, Acid mine drainage (AMD), and Acid rock drainage (ARD) study: ± 2 months
4. Community Development and Empowerment Plan (RIPPM) document: ± 2 month

The service offers environmental and social documents preparation which required by government in order to obtain permits for Mining business activities

Scope

1. Reclamation plan (comply to latest regulation)
 - Data Collection and Data Assessment
 - Document Preparation
 - Presentation
2. Mine closure plan (comply to latest regulation)
 - Data Collection and Data Assessment
 - Document Preparation
 - Presentation
3. Water management monitoring, Acid mine drainage (AMD), and Acid rock drainage (ARD) study
4. Community Development and Empowerment Plan (RIPPM) document
 - Technical instruction for social mapping
 - Document preparation
 - Approval request assistance





Scoping and Feasibility Study for Plant (Smelter) Project Development

MET-01

Deliverables

1. Scoping study report
2. Pre-feasibility study of plant (smelter) document report
3. Detail Engineering Design (DED) document

Duration

- Scoping study: ± 2 months
- Feasibility study ± 4 months

Several steps should be taken to reduce risks and prevent the failure of smelter project implementation. We offer an excellent service in this field which will be run by competent team and partners who are experienced in the operation, maintenance and management of smelter factories either during commissioning or commercial operations.

Scope

1. Scoping study:
Our service offers scoping study that includes sufficient work to perform a detail enough study and analysis to present initial information regarding product yields and quality, notional project costs, and rough utilities requirements to make a sound financial assessment for the plant (smelter) development. The study is sufficiently enough to satisfy your needs so that you will be also introduced the process scheme of plant development phase without negating the study findings as well as change the notional costs significantly.
2. Feasibility study:
This study provides more detail study than the former one (scoping study) prior to start development phase. The process scheme of the plant development as well as detail cost estimation for plant development will be covered, therefore you will be well informed about the financial requirements, final equipment and Detail Engineering Design (DED). In other words, this study utilized more detailed data than the scoping study to identify all essential process scheme for the plant development, processing & refining concept of the plant, equipment required, engineering work, management, timeline, project implementation, commercial, legality, financial model, and likelihood of unscheduled outages.

Metallurgy is another important field in coal and mineral business. It comprises some specific metallurgical works such as processing, refining, and so on. Since this field is mainly related to processing plant or smelter development, a huge amount of capital is needed to support and maintain this business. However due to complex processes taken place in the operation, many metallurgical companies could not perform well, either from technical or economical sides. Therefore, TURA comes with metallurgical consulting services to assist metallurgical companies in running their business smoothly.

Metallurgy Services



Technology and Plant Design

MET-02

Deliverables

Plant design report and DED

Duration

Depend on technology framework and scope of work

This service provides all of the information that a detailed engineering needs to build a reliable plant (smelter) and cost-effective unit for specific plant technology. Our expert and associates help you to construct the process flow scheme and designated framework of all major components that engineering fundamentals, plant concept customization, and equipment required can help you to adopt a reliable and well-established plant technology. Our specialities are providing a study and detail engineering design for Sinter plant, Lime Making plant, Coking plant and Hot Blast Stove.

Scope

- Processing & refining concept of:
- Sinter plant
 - Lime making plant
 - Coking plant
 - Hot blast stove
- Detail engineering design (DED)





Mining and Energy Policy plays a significant role in determining not only the current, but also the future, of mining and energy business. Due to the importance of this field, the involvement of competent experts from various fields are needed in mining policy and regulation generation in order to ensure the consideration of technical, economical, social, environmental, legal, and political aspects. TURA is offering mining and energy policy service to various mining and energy policy related organizations, ranging from the Indonesia government to international organizations, such as World Bank and ASEAN Centre for Energy.

Energy and Policy Services



Energy Economics and Policy Analysis

Deliverables
Energy economics & energy policy report

Duration
Depend on scope

EP-01

Energy Economics is the field that studies the utilization of energy resources and energy commodities and its consequences, while Energy Policy is the manner of a government to address issues of energy development and management including energy production, distribution, and consumption. As integration from mining and extraction industries, energy resource management and optimization take important roles in sustainable development, especially the optimization of non-renewable energy resources and renewable energy resources.

We endeavour to support many studies and researches related to energy economics & policy such as analysis of energy demand, energy supply, energy price, energy resources optimization, and energy commodities substitution, especially for depletable energy resources as the transition to renewable energy resources as well as environmental issues of energy uses. Supported by various experts from energy sectors, we are confident to support related stakeholders to achieve the optimal use and management of energy resource commodities.

Scope

- RE regulatory framework and policy
- RE technology development
- Renewable - Non Renewable Energy economics study
- Renewable - Non Renewable Energy policy evaluation & strategic policy formulation
- Renewable Energy Mapping, Optimization & Supply Chain study

Mining Economics and Policy Analysis

Deliverables
Mining economics & energy policy report

Duration
Depend on scope

EP-02

Mining Economics is the field that studies the utilization of mine commodity resources, reserves, its consequences, while Mining Policy is the manner of a government to address issues of mining legality, development, production, distribution, and consumption. Our expert will provide a comprehensive analytical study of integrated mining and extractive industries concerning dynamical regulatory framework and economical risks in order to help you deciding where to go with certain condition. Thus, this service will also help you to reduce the uncertainty level of business risks. We endeavour to support many studies and researches related to mining economics & policy such as analysis of minerals and non-minerals supply-demand, price fluctuation, resources & reserve optimization, commodities substitution, mining technology transition, environmental issues, and also legal aspects from policy dynamical changes.

Scope

- Analysis of mining regulatory framework and policy impacts
- Study of mining technology development
- Mining economics study
- Mining policy evaluation as well as strategic policy formulation
- Mining supply Chain study



Mine Development and Operation Assistance

Deliverables

Plan of Development document, Progress monitoring reports and recommendations, Final project reports.

Duration

Depend on analytical framework and given scope

SM-01

Mine development phase is consisted from prospect finding & exploration, discovery, feasibility studies, development & construction, operation & production (include production expansion development) and mine closing / reclamation. Each development stage should be undertaken optimally and carefully to achieve profitability and sustainability of the projects. We provide full-service mine development assistance for construction development & starting production for greenfield mine prospects as well as expansion/development of brownfield projects. We will help you to successfully achieve the following objectives:

- a) Established new mines into production
- b) Supervising & monitoring progress for mine construction & development
- c) Achieve mine expansion to extend LOM and increase production
- d) Successfully restarting mine operation
- e) Assisting existing mines to become more cost-effective

Scope

- Plan of Mine Development Document Preparation
- Assistance, supervision & monitoring in mine construction & development
- Mine expansion development's project management
- Assessment and audits of mine development projects
- Assessment and audits of existing mine operation to extend LOM and increase production
- Assistance, supervision & monitoring in restarting operation projects

Strategic Mine Management and Improvement Assistance

Deliverables

Progress monitoring reports and recommendations, Final project reports.

Duration

Depend on analytical framework and given scope

SM-02

Mining is an industry that has many risks and is prone to changes in political, commodity price, environmental and social condition, etc. Therefore, it should be managed optimally and strategically to achieve project's profitability and sustainability. Constant changes and challenges in current global commodity supply chain should be addressed strategically through an comprehensive yet practical mine management. Moreover, any inefficiencies should be assessed and improvement through set of improvement framework and actions. Supported by our set of principal, experts and associates, we are ready to hear your problem and solve it optimally with our services in strategic management & improvement assistance.

Scope

- Conditional analysis & assessment
- Preparation of mine improvement framework, stages and action plan
- Strategic mine management advisory & assistance
- Project management & monitoring
- Bridging technical issues and management target

In this challenging era, a strategic management approach to mining and energy business has taken crucial part to ensure the business survivability, profitability and sustainability. Business in mining and energy sectors need a huge amount of capital, not only in the operation stage, but also since the preparation stage long before the mining operation commenced. There are many challenges and risks to mining and energy business such as geological (nature) risk, technological risk, policy risk, socio-environmental risk and market risk which affects the commodity's price volatility. To answer and manage those risks and challenges, TURA offers strategic management services to many organizations, including but limited to companies in mining and energy sector.

Strategic Management Services



HR Management Assistance

SM-03

Deliverables

HR Management Assistance progress report and final report

Duration

Depend on analytical framework and given scope

Human Resources is known as a “complicated” area. Many problem will be arise if company not handled properly. Compensation & benefit, employee layoffs, and failure during recruitment process will raised many problem in the next time. Our expert will help you to reduce high risk in employee management. We offer a service that supporting your companies to manage Human Resources area, starting from recruitment management, organization development, employee assessment, people development, industrial relations, and human resources information system. Besides, we also offer assistances in external relations management and community development matters.

Scope

- ☒ Collecting data and information
- ☒ Problem mapping in human resources area
- ☒ Organization development
- ☒ Recruitment management
- ☒ Performance management
- ☒ People development
- ☒ Industrial relations
- ☒ Termination management
- ☒ Personnel management
- ☒ Develop Human Resources Information System (based on ERP) to integrating your business process
- ☒ Assistance on employment license from government
- ☒ External relations management
- ☒ Community development

Risk Management Analysis

SM-04

Deliverables

Risk identification & mitigation program report

Duration

Depend on analytical framework and given scope

Our experts will help you to reduce barrier from high risk level activities in mining and energy industries as well as reduce uncertainty level from unexpected outcome. We offer a service that supporting companies through risk management approach that will help you to discover and identify risk level, make a severity assessment, construct action plan as well as implementation, create risk evaluation, adapt safety culture, enhance leadership, and apply good management systems.

Scope

Our specialities:

- HSE Management
- Safety culture enhancement
- Safety leadership
- Safety management system
- Litigation support
- Fraud and corporate investigation
- Political risks



Mining and Metals Investment Advisory

Metal and mineral commodities has been taken an important role in many aspects of modern life, as well as answering the needs of current trends and future generation needs. One of current trends is a growing demand of materials to support green economics development. Indonesia as one of country with abundant and varies metal and mineral deposits has been taken a strategic role in supporting global commodities supply chain and trade.

In order to discover, develop and exploit it responsibly to give the most benefit to stakeholders, any mine development projects should be conducted optimally and accordingly to best practices in geology and mining as well as comply to current applicable regulation and policies. Besides, any risks and changes should be addressed optimally in an comprehensive financial and investment analysis to maintain project profitability.

Consisted of various principal and experts in geology, mining, metallurgy, policy, finance, strategic business management and stakeholder relations, our team are ready to advise and assist you to develop your prospects, optimize investment and financing decisions, and grow your projects to be a sustainable metal and mineral business.



Stakeholder Relation Advisory and Mediation

IA-01

Deliverables

Strategic advisory documentation & report

Duration

Depend on analytical framework and given scope

To develop a sustainable mining projects, there are many involvements of mining stakeholders whether they are professionals & practitioners, academics, governments, laboratories and business entities not only from mining sector itself but also from many different sectors : forestry, environmental, taxation, legal/jurisdiction, regional institutions, banking and finance, sea & land transportation, electricity institutions, etc.

In order to successfully conduct communication and relation with required stakeholders and institution, a strategic approach based on frameworks and complied regulations should be considered in order to optimize mine development stages and process. Our expert team consists of experienced technical expert, financial expert, strategic relation experts, academics associate and well as strategic business professionals are ready to present you advisory & mediation services on stakeholder relation in order to achieve the business goals, optimally.

Scope

- ☒ Business condition evaluation based on applicable regulations and law
- ☒ Current stakeholder relation assessment
- ☒ Mediation to required stakeholders
- ☒ Strategic communications advisory
- ☒ Advisory on up-to-date and regulation and law advisory

Mine Investment and Strategic Financing Analysis

IA-02

Deliverables

Investment analysis simulation, Financing simulation, Strategic Investment & Financing report

Duration

+3 months or refer to given data and scope

Mining and energy industry are the capital-intensive business, which exposed to high risks with many uncertainty factors. In early stage of the industry development, huge investment is needed to climb onto next stage to enter more profitable business ecosystem. Before determining the best financing scheme, an analysis of current financial condition of the company is required. In addition, a comprehensive financial analysis from technical point of view is also important to be conducted. Then, a more precise financial impact from each available financing schemes could be projected so that the best financing scenario could be chosen.

We have a complete team which consists of financial experts, investment analysts, technical and legal expert, who are proven in presenting complete analysis from geology and exploration, mining, metallurgy and even policy aspects. As a result, a comprehensive strategic financing analysis could be delivered to our client to maintain the financing and investment activities going well in order to achieve maximized value of their mining and energy enterprises.

Scope

- ☒ Collecting data and information
- ☒ Conduct investment funding strategies study
- ☒ Provides calculation of the payback period
- ☒ Provides calculations regarding the potential loss & benefit opportunity both technically and financially
- ☒ Provide the most optimal funding strategy recommendations (in the form of funding schemes and required capital injections)

Market Analysis and Entry Strategy of Specific Mining Commodities

IA-03

Deliverables

Comprehensive market study report

Duration

+3 months

Whether starting or operating businesses in Mining and Energy sectors may incur more cost than revenue without a prior market research, more often due to unpredicted market behaviour influence your sales performance. Hence, a strong market study is required to support your idea with fact-based market research instead of merely stay with gut feeling.

The study also aims to catch a potential customer as the main users of your business so that you can be informed and prompt sales strategy. Therefore, this service can help you to ensure the marketability of your business activities and robust your sales strategy.

Scope

The study provides careful attention to the following:

1. Market Analysis, focus on:
 - ☒ Identify industry size,
 - ☒ Growth rates,
 - ☒ Critical Drivers,
 - ☒ Opportunity & challenges,
 - ☒ Major players,
 - ☒ Market forecasts as well as emerging trends, and
 - ☒ Brief competitive analysis of key competitors
2. Target Market, focus on:
 - ☒ Demographic overview,
 - ☒ Elasticity of supply and demand,
 - ☒ Scenario marketing planning,
 - ☒ Identifying prioritize customer,
 - ☒ Challenge in sales, and
 - ☒ Sales strategy

Mine Prospect Finding Assistance and Comprehensive Due Diligence (Legal, Technical, Financial)

IA-04

Deliverables

Database of potential prospect and Due Diligence report

Duration

- Due Delligence: ± 3 months
- Others: Depend on scope and target

Due to capital intensive characteristics of mining industry, it is important that the risks is being minimized using a set of assessment and studies. In order to minimize investment decision risk, a set of staging of prospect study and evaluation is required such as desk study and comprehensive due diligence (in legal, technical and financial aspect) as part of investment feasibility assessment.

One of challenges faced by many mining business practitioner and investors is to map and assess the potential prospects. Completed by experts from the field of geology, mining, metallurgy and finance, our team is ready to assist your investment analysis and prospect finding activities (with respect to a defined prospect specification / target) as well as comprehensive due diligence to ensure the selection of most optimal and profitable prospect as basis for your investment decision making.

Scope

1. Mine Prospect Finding Assistance, focus on:
 - ☒ Target Generation
 - ☒ Reconnaissance and Regional Geology Assessment
 - ☒ Prospect Finding & Database Construction based on Target Prospect
 - ☒ Regular Database Update
 - ☒ Recommendation of potential prospect selection
2. Comprehensive Due Diligence, focus on:
 - ☒ Data Collection (primary)
 - ☒ Data Verification and Validation
 - ☒ Site Visit & Site Audits
 - ☒ Legal Due Diligence
 - ☒ Technical Due Diligence (geology, exploration, resource-reserve, FS review)
 - ☒ Finance Due Diligence & economic feasibility
 - ☒ Cooperation scheme simulation analysis
 - ☒ Investment decision recommendation

Portfolios



Our Clients



Our Portfolios

Geology and Mining Services Portfolios

Citra Mineral Investindo, PT
Geotechnical, Hydrology, Hydrogeology Investigation for Bauxite Residue Facility Design

PT Cita Mineral Investindo Tbk (PT. CMI) is going to develop supporting facility of its Bauxite Processing plant, including the existing Residue Storage Facility (RSF). In order to support RSF development plan, this study is conducted by doing a series of geotechnical, hydrology-hydrogeology investigation, and embankment design. The purpose of this study is to give recommendation related to the stability of developed RSF design, to provide sufficient document for RSF construction, operation and maintenance, and also to comply with both national and international dam safety standard practices.

Sinarmas Mining
Coal Resources-Reserves Report JORC 2012

Sinarmas Mining was going to join a coal supply tender for 2 x 150 MW Coal Fired Power Plant. One of the main requirements of the tender was reporting the amount of coal reserves owned by Sinarmas Mining in accordance with JORC Code 2012. TURA was offering JORC Code 2012 Resources and Reserves Report Preparation Service, which consisted of three main parts: JORC Code 2012 Resources Statement, Pre-Feasibility Study Report and JORC Code 2012 Reserves Statement.

Medco E&P Indonesia, PT
Peer Review Mine Design of Open Pit Oil Mining Pilot Project

PT MEDCO E&P INDONESIA is planning to develop its oil & gas concession in South Sumatera block. One of the prospect areas contained Heavy Oil deposit (700 Ha of sweet spot zone in 9 km concession, with depth of 60 m). Due to the regulation aspect, this project has been held or delayed and in 2019, MEDCO got an agreement to conduct a pilot project of open pit oil mining through Ministerial Decree No. 111K/11/MEN/2019 regarding the assignment to conduct an open pit oil mining pilot project. This project is going to be the first and a pioneer project for open pit oil mining in Indonesia carried out by MEDCO.

Satria Bahana Sarana, PT (subsidiary with PTBA)
Due Diligence (Legal, Technical, and Economic) of Coal Mining Companies

PT SBS has a plan to increase the mining operation work area. The purpose of this work is to provide advisory services for the PT SBS Due Diligence assistance in conducting analysis and evaluation of coal mining companies. Due Diligence activities should be carried out comprehensively, which will analyze the feasibility aspects of the business development of a coal mining company, namely legal and general aspects, technical aspects - exploration, technical aspects - mining and infrastructure, as well as economic and financial aspects.



Metallurgy Services Portfolios



ANTAM NiTERRA HALTIM, PT (Subsidiary of PT ANTAM Tbk)

Feasibility Study of Nickel Pig Iron Smelter Plant

PT Antam Niterra Haltim planned to construct lateritic nickel ore processing plant with the blast furnace technology. Tura conducted the feasibility study to confirm that the techno-economy calculation of this project is up to date and to meet the standard of the to meet the standard from Ministry of Energy and Mineral Resources of Indonesia (KESDM). The study was important as an assessment of the practicality of a proposed plan or method. Furthermore, it should provide a study of the raw material, details of the operation and management, market research, financial forecast, etc.



GAG NIKEL, PT (Subsidiary of PT ANTAM Tbk)

Feasibility Study of Ferro-nickel Smelter Plant

Currently, PT Gag Nikel's nickel ore is marketed to domestic nickel smelter plants in Maluku and Southeast Sulawesi where the nickel ore's price is controlled by those smelter plants which affects the profits gain for PT Gag Nikel's stakeholders. Therefore, to reduce the dependency of PT Gag Nikel towards those nickel smelter plants, PT Gag Nikel plans to build a processing and refining plant of nickel ore into ferronickel (FeNi). The feasibility study was conducted by determine by comprehensive study and through systematical formulation process based on simulation of engineering scenario and financial scheme to reach the desired result.



SINAR JAYA SULTRA UTAMA, PT

Feasibility Study of Ferronickel Luppen Smelter Plant

The economic level of a smelter does not only depend on the quality of the ore that owned and the desired financial scheme, but also depends on the selection technology by considering all aspects related to the smelter development plan. With the unique characterization of the ore, ferronickel luppen technology was chosen by SJSU as the best technology to process SJSU's nickel ore. The technology selection is one part of feasibility study formulation step. In this step TURA is giving the best consideration to all available technology options related engineering and economic aspect.

SINARMAS MINING

- Coal Resources-Reserves Report JORC 2012
- Geostatistics Analysis & Optimization for Exploration Drilling Project
- Pre-Feasibility Study of Coal Mining Project
- Coal Mining Improvement Project

SATRIA BAHANA SARANA, PT

- Exploration Review of Coal Mining Project
- Geological Model Reconstruction of Coal Mining Project
- Mining Contractor Assistance
- Due Diligence (Legal, Technical, and Economic) of Mining Company

HALMAHERA PERSADA LYGEND, PT

- Pre-Feasibility Study of Tailing Project

CITA MINERAL INVESTINDO, PT

- Geotechnical, Hydrological-Hydrogeological Investigation and Bauxite Residue Pond Design

VICTOR DUA TIGA MEGA, PT

- Coal Resources-Reserves Report JORC 2012
- Geotechnical, Hydrology, Hydrogeology Study
- Pre-Feasibility Study of Coal Mining
- Mine Engineering Assistance
- Geotechnical Drilling Supervision

EMAS HITAM MULIA, PT

- Coal Resources-Reserves Report KCM1 2017
- Feasibility Study of Coal Mining
- Long Term Plan of Coal Mining Project
- Reclamation Plan of Coal Mining Project
- Mine Closure Plan of Coal Mining Project
- 2019 RKAB Preparation

MANDIRI ADI JAYA UTAMA, PT BATUBARA SELARAS SAPTA, PT

- Iron Ore Exploration (Pre-Development)
- Exploration Review of Coal Mining Project

MOFATAMA ENERGI, PT

- Pre-Feasibility Study of Tailing Project
- Iron Ore Exploration (Pre-Development)

DALEA GROUP TEKA MINING RESOURCES, PT

- Valuation and Feasibility Study of Tin Mining Project
- Feasibility Study Review of Nickel Mining

BUANA RIZKY ARMIA, PT TRAFIGURA PTE. LTD

- Coal Mining Preparation & Barge Transportation Analysis
- Coal Trading and Selling Contract Assistance

SEMESTA ALAM BARITO, PT

- 2019 RKAB Preparation
- Community Development & Empowerment Master Plan
- Geo-Metallurgy Analysis of Nickel Exploration Project
- Feasibility Study of Review Nickel Mining

SINAR JAYA SULTRA UTAMA, PT

- Limestone Project Exploration Review for JORC
- Limestone Quarry Mine Planning & Operation Review

UNDISCLOSED LIMESTONE COMPANY CICATIH, PT

- ZJG RESOURCES TECHNOLOGY INDONESIA, PT
- UNDISCLOSED COPPER MINE COMPANY
- FAJAR BHAKTI LINTAS NUSANTARA, PT
- TEKA MINING RESOURCES, PT
- ANTAM NITERRA HALTIM, PT
- SINAR JAYA SULTRA UTAMA, PT
- ADHI KARTIKO PRATAMA, PT
- CICATIH, PT
- SUMBER BAJA PRIMA, PT
- BW BAJA INDONESIA, PT
- KINLIN NICKEL INDUSTRY INDONESIA, PT
- GAG NIKEL, PT
- UNITED TRACTORS, PT
- NUSANTARA SMELTING CORPORATION, PT
- JOGJA MAGASA IRON and PT ITHIKHARA, PT
- MAGNA SOLUSI ASIA, PT

- Coal Upgrading Plant
- Tailing Utilization for Environmental Preservation
- RKEF Nickel Smelter Basic
- Nickel Pig Iron Smelter Plant
- Nickel Pig Iron Smelter Plant
- Ferronickel Luppen Smelter Plant
- Design Hydrometallurgy Nickel Extraction Plant
- Limestone Processing Plant Review
- Iron Sand Processing Plant
- New Ironmaking and Steelmaking Plant
- Nickel Pig Iron Smelter Plant
- Ferronickel Smelter Plant
- New Ironmaking and Steelmaking Plant
- Update Basic Engineering Study for New Copper Smelter
- Iron Sand Concentrating Plant
- Copper Concentrating Plant



Mining and Energy Policy Services Portfolios



THE WORLD BANK
Opportunities and Challenges to Promote Development of a Domestic Supply Chain to Support Growth of Renewables in Indonesia: The Role of Mining and Mineral Processing Sector

This study aims to identify the opportunities and challenges as well as provide several strategies and measures in realizing the existence of complete Renewable Supply Chain system based on Indonesian critical mineral resources, specifically for solar photovoltaics (PV), wind turbine, and geothermal. Moreover, it also aims to conform the Indonesia's national plan to get on-board with the global transformation stream from a carbonintensive into a carbon-constrained economy.



Bappenas
Study of Integrated Planning between Renewable Energy Sector and Industrial Sector

This study is conducted to provide strategies and recommendations as input in the formulation of regulations and policies to support the integration process of renewable energy and industrial sector. Industrial sector is one of the biggest energy-intensive sectors in Indonesia which dominated by carbon-based energy sources. On the other hand, the use of renewable energy sources in Indonesia is not optimized yet. This study aims to ensuring the fulfillment of energy demand from industrial sector will be fulfilled by renewable energy which further will accelerate the increase of renewable energy portion in national energy mix as mandated in the General Design of National Energy (Rancangan Umum Energi Nasional / RUEN).



Bappenas
Background Study of National Medium-Term Development Plan (RPJMN) 2020-2024 for Energy, Mining, and Mineral Sectors

This study aims to evaluate the current condition and identify the root problems in the development of sector of energy, mineral, and mining resources. The result of this study will provide a thorough understanding of energy, mineral, as well as mining sectors in Indonesia as a basis for delivering strategies and recommendations as input in the formulation of RPJMN (National Medium-Term Development Plan) 2020-2024.



GIZ for ASEAN Center of Energy
Study of Integrated Planning between Renewable Energy Sector and Industrial Sector

The development of the AEDS Data Transformation platform aims to provide visualization of statistical data submitted by ASEAN member countries regarding production and consumption data from all energy sources. The main important thing in this project is to assess and develop robust energy balance table system from 6 questionnaires (coal, oil, natural gas, renewable energy, electricity & energy price) with more than 1 thousand data.

THE WORLD BANK

- Transformation to Low-Carbon Economy: Development of Renewable Energy Industrial System in Indonesia; the Role of Extractive Industry

BAPPENAS

- Policy Evaluation of LPG Subsidy
- Renewable Energy Potential Mapping
- Evaluation of 2019 Coal Domestic Market Obligation Target
- Background Study of RPJMN 2020–2024
- Integration Planning of Renewable Energy an Industrial Sector

**KEMENTERIAN KOORDINATOR KEMARITIMAN
KEMENTERIAN PERINDUSTRIAN**

- National Mining and Energy Strategic Project Monitoring 2017
- Preparation if RIPIN 2015 - 2035 (Industrial Development Plan Policy)

**ANTAM (Persero), PT
DITJEN MINERAL DAN BATUBARA, K-ESDM
ASEAN CENTRE FOR ENERGY**

- Mineral Value Added Policy & Public Relation Strategy
- Preparation of National Coal and Mineral Policy
- ASEAN Energy Database Analysis



Strategic Management and Mining and Metals Investment Advisory Portfolios



Mega Guna Ganda Semesta, PT
The Study of Market Mapping and Tariff Estimation for Central Kalimantan Coal Railway Project

This study is aimed at assessing Central Kalimantan Coal Railway Project's marketability from technical, environmental, social, legal, and the most important, financial and economical aspect. The marketability study is conducted by mapping potential customers, which are coal companies, as main users of The Coal Rail Project, and analysing Willingness-To-Pay (WTP) Tariff Estimation for The Coal Rail Project.



Satria Bahana Sarana, PT
(Subsidiary of PT Bukit Asam Tbk)
Strategic Financing Analysis

In order to support the plan of increasing its coal production capacity, PT SBS was going to purchase heavy equipment through several stages of financing from some financial intitutions. Therefore, TURA offered Investation Financing Strategy Analysis, which consisted of several works, such as doing analysis from operation, business and financial aspects, determining financial schemes combination, conducting financial projection of every financial schemes, and choosing the best financial scheme. The purpose of this study was to provide advice and recommendation for SBS Management for Investation Financing.

SATRIA BAHANA SARANA, PT

- Economic Feasibility Analysis of Coal Mining Projects
- Strategic Financing Analysis
- Coal Mining Contractor Tariff Evaluation

PLN BATUBARA, PT

- Valuation and Appraisal Review of Coal Mining Company Acquisition

a Coal Mining Company in Indonesia

- Coal Supply Chain Optimization
- Coal Mining Company Group's Asset Management

TEKA MINING RESOURCES, PT

- Financial Projection and Optimization Modelling for Nickel Smelter Project

VICTOR DUA TIGA MEGA, PT

- HR Management Assistance
- Mine Management Assistance

TRAFIGURA Pte. Ltd.
An Iron Ore Mining Company in Australia

- Coal Trading Management
- Iron Ore Mine Portfolio for Initial Coin Offering

**PERTAMINA (Persero)
PELITA AIR SERVICE
UNDISCLOSED GOLD MINING COMPANY
PLN Pusenlis
THRIVENI, PT**

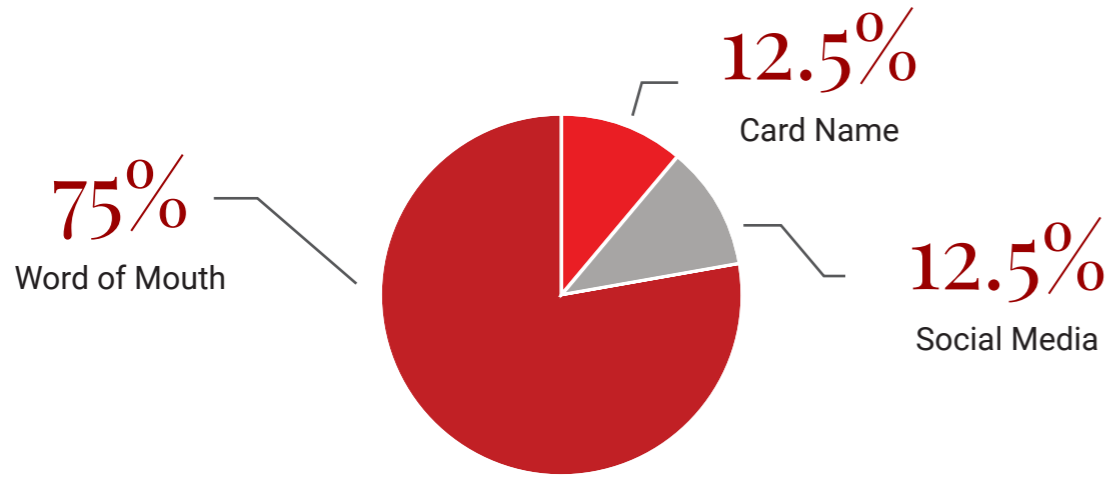
- Develop, Customize, Upgrading Cascading KPI System
- Develop System Cascading and KPI Monitoring
- Gold Market Research
- Business Process Re-engineering
- Mining Business Development Assistance

What They are All Saying



The Engagement Survey

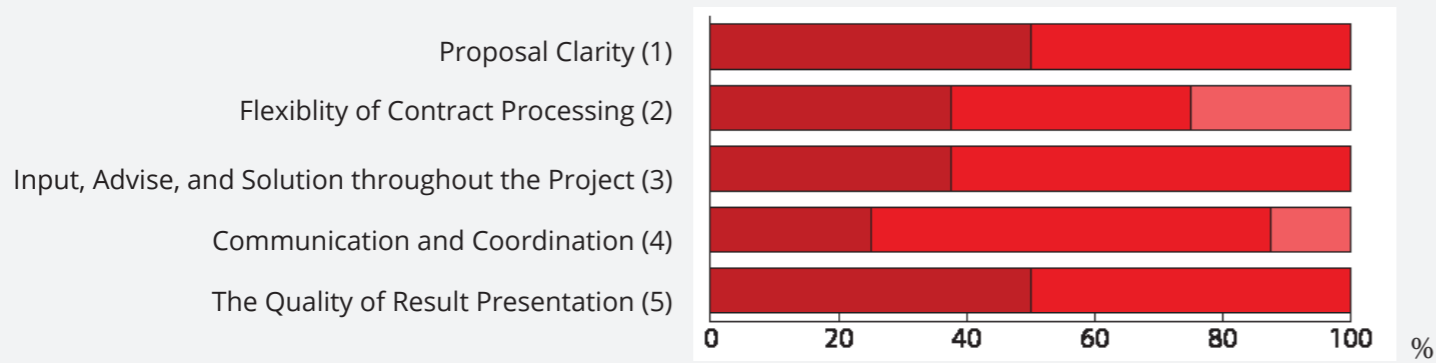
Where did you hear about us?



Never heard from: E-mail | Website | Booklet

Did you satisfy enough?

■ Better than Expected
 ■ Completely Satisfied
 ■ Fairly Satisfied
 ■ Dissatisfied
 ■ Worse than Expected



75%

(6) client rated our services meet their expectation

100%

(7) clients are feeling guided and well-informed

100%

(8) clients satisfied with our service in general

100%

(9) clients believe in our capability to handle their other projects

100%

(10) clients will recommend our services to their colleagues



Customer Spotlight



"It took time to adapt with the new research topics regarding the project, but that was not a big problem. No need a long time for TURA to keep pace and we satisfied with the final result."

BAPPENAS

"Maintain your flexibility, responsiveness, and work qualities. Keep spirit and I hope TURA become the consulting expert in Energy and Mineral Resources Sector."

BAPPENAS



"TURA already have good quality service at present, Keep improve the overall performance."

HARITA MINERAL



PT Tura Consulting Indonesia (TURACONS)

an integrated mining consultant which is established to deliver various consultancy services in geology & mining, processing-refining, energy & mining policy, strategic management, and mining & metals investment advisory.
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