# **TENDER** INDON 50 IUNITES Written By : Tito Loho

(CEO www.tender-indonesia.com)

# A BRIEF MESSAGE

First of all, we thank God Almighty for the publishing of this electronic version book (E-BOOK).

We know that many books have been written related to the investment topic. The book we write, certainly complement the availability of more information the business can get.

There are several existing books that focusing on investment regulation, some other are focusing on technical sectoral regulation. Some other are general information and some other are focusing in macro figure.

But our book, which takes a very specific title INDONESIA PROJECT OPPORTUNITIES, offering very spesific valuable content.

The most value is because we share directly to the point what entrepreneurs want to know, especially for those who are suppliers and contractors.

We share important information about what the project is, where it is located, when will be started, and what the value is. All that are written in this book, deliver the best answer for the above question. This book is in the form of electronic (E-BOOk) simply because the updating come so fast considering the project development is very dynamic.

Finally, we hope that this book can benefit all of you.

Goodluck.

Tito Loho CEO www.tender-indonesia.com

# Content

| 4  | Introduction of Indonesia                                       | •     |
|----|---|-------|
| 1. | Introduction of Indonesia                                       | 3     |
|    | 1.1. About Indonesia  | 3     |
|    | 1.1.1. Geographic   | 3     |
|    | 1.1.2. Demography   | 3     |
|    | 1.1.3. Macro Economy  | 3     |
|    | 1.2. Business Field by Sectors                                  | 3     |
|    | 1.3. Business Projects by Sectors                               | 4     |
|    | 1.3.1. Natural Resources (oil & gas, mining, geothermal, etc)   |       |
|    | 1.3.2. Power Plant, Transmission & Distribution                 |       |
|    | 1.3.3. Infrastructure (Highway, Dams, Bridge, etc)              | 32    |
|    | 1.3.4. Telecommunication  |       |
|    | 1.3.5. Tourism  | 42    |
|    | 1.3.6. Transportation (Airport, Seaport, Train & Railway)       | 43    |
|    | 1.3.7. Agro and farm (Palm, Rubber, Sugar, Tea, Coffee, etc)    | 51    |
|    | 1.3.8. Manufacturing Plant (Steel, Petrochemical, Otomotive, et | c) 55 |
| 2. | Searching the projects  | 62    |
|    | 2.1. Introduction www.tender-indonesia.com                      |       |
|    | 2.2. Services That We Provide                                   |       |
|    | 2.2.1. Type of Service  | -     |
|    | 2.3. Membership and Benefit                                     |       |
|    | 2.3.1. Membership Premium                                       |       |
|    | 2.3.2. Membership Gold  |       |
|    | 2.3.3. Membership Platinum                                      |       |
|    | 2.3.4. Upgrading Membership                                     |       |
|    | 2.4. How To Register Membership & The Payment                   |       |
|    | 2.4.1. Register Online  |       |
|    | 2.4.2. Marketing Support Desk                                   | 69    |
|    | 2.4.3. The Payment  | 69    |
|    | 2.5. How To Use Our Services                                    | 70    |
|    | 2.5.1. Information Service Tender Information                   |       |
|    | 2.5.2. Information Service Project Update                       | 75    |
|    | 2.5.3. Information Service Tender Award                         |       |
|    | 2.5.4 .Non Information Service Tender Consulting                | 79    |
|    | 2.5.5. Non Information Service Tender Licensing                 | 79    |
|    | 2.6. Our Services Matrix For Member and Non Member.             |       |
|    | 2.7. Our Services Compared With Other Services                  |       |
|    | 2.7.1. What is the difference www.tender-indonesia.com          |       |
|    | 2.7.2. What is the advantage of www.tender-indonesia.com        |       |

# 1. Introduction of Indonesia

# 1.1. About Indonesia

# 1.1.1. Geographic

Republic Indonesia is an archipelagio (islands state) located at equatorial in the South East Asia region. Consist of more than 13.000 islands with 5 big islands (Sumatera, Java, Kalimantan, Sulawesia, and Papua), It makes Indonesia becoming maritime nation. The total land area of Indonesia is 1,811,570 Km2 (699,451 sq. miles).

# 1.1.2. Demography

The current population of Indonesia is 267 million, the fact that Indonesia population is equivalent to 3.5% of the total world. This population ranks number 4 in the world. And 55% of the population is urban young people (median age 28), makes it growth so fast and dinamyic.

# 1.1.3. Macro Economy

Indonesia currency is Rupiah (Rp). The government macro economy target for 2019 are :

- 1. Economy growth 5,8 %
- 2. Inflation 3,5 %
- 3. Tax ratio 12 % of PDB
- 4. Unemployment 5,2%
- 5. Poverty 9,5 %

# **1.2. Business Field by Sectors**

- 1. Natural Resources
- 6. Transportation

7. Agro and Farm

2. Power Plant

8. Manufacturing Plant

- 3. Infrastructure
- 4. Telecommunication
- 5. Tourism

# 1.3. Business Projects by Sectors

#### 1.3.1. Natural Resources

#### 1.3.1.1. Oil & Gas

Based on the data, there are 255 blocks of oil and gas working areas in Indonesia. With details of the areas are 134 onshore, 83 offshore blocks, and there are 34 blocks that are partially onshore and offshore. The 2018 spending for expenditure of oil and gas activities is US \$ 9.3 billion.

It was much lower than US \$ 20 billion at its peak in 2014. But the better price of oil is expected to return the desire for investing more. The daily oil production is 778,800 barrels per day, while gas production is 7.78 million mscfd (metrik square cublic feet daily).

#### EXPLORATION PRODUCTION

The Indonesia oil and gas block consists of 87 exploitation blocks and 119 exploration blocks. Where for all of the exploitation, there are 73 blocks in the production stage, and there are 14 blocks in the development phase. Meanwhile for oil and gas exploration, there are 88 blocks in the exploration phase and 31 blocks in the termination stage. While for the nonconventional block (coal methane CBM) consists of 43 active blocks and 6 blocks of termination stage.

#### OPERATOR

There are many big and small oil and gas companies operates in Indonesia.

Here are the operator based on oil production:

- Chevron Pacific Indonesia/CPI at Rokan Block 212.000 Bpd (Barrel per day)
- 2. Pertamina EP 76.000 Bpd
- 3. Pertamina Hulu Mahakam 46.100 Bpd
- 4. Pertamina Hulu Energi ONWJ Ltd 30.000 Bpd
- 5. Medco E&P Natuna 17.100 Bpd
- Joint operation body Bumi Siak Pusako Pertamina Hulu 10.500 Bpd
- 7. Mobil Cepu Ltd at Blok Cepu 210.000 Bpd
- 8. CNOOC at South East Sumatera Offshore 31.000 Bpd
- 9. Petronas Carigali at Block Ketapang Ltd 17.000 Bpd

- 10. Chevron at Block East Kalimantan 18.000 Bpd
- 11. PetroChina International Jabung Ltd 55.000 Bpd
- 12. Vico Indonesia at Block Sanga Sanga at 11.000 Bpd
- 13. And the rest of other oil and gas blocks contribute arround 44.300 Bpd.

#### INCOMING PROJECTS

There will be some incoming projects to be expedited until 2025.

Here are the projects that Indonesia government focus on :

- Ande Ande Lumut Status : EPC Tender Production tergeted at Q1-2021 (20.000 Barrel per day)
- Merakes
   Status : Proses Plan Of Development
   Production gas estimated 391 MMScfd
- Badik & West Badik
   Status : FEED Tender
   Production targeted at Q3-2020 for gas (60 MMscfd)
- IDD Gendalo-Gehem
   Status : Plan Of Development first Revision
   Gendalo gas production targeted 700 MMScfd, dan oil
   20.000 Bpd at Q4-2022
   Gehem gas production targeted 420 MMscfd dan oil
   27.000 Bpd at Q2-2023
- 5. Senoro Status : Plan Of Development and Pre FEED
- Tangguh Train 3 Under Construction tergeted production at LNG 3,8 MTPA (equivalent gas 700 MMscfd) and oil 3.200 Bpd at Q2-2020
- Asap Merah Kido (AMK)
   Status : Plan Of Development
   Targeted gas production 170 MMscfd
- Abadi (LNG)
   Status : Pre-FEED Tender
   Upstream and downstream facility (LNG Plant)
- MDA dan MBH Status : Under construction targeted gas production 175 MMscfd at Q2-2019
- Jambaran Tiung Biru
   Status : Under Construction
   Targeted gas production 330 MMscfd at 2020

- L-Parigi Status : FEED Tender targeted gas production 60 MMscfd at Q2-2021
- Jambu Aye Utara Status : FEED Tender preparation Targeted gas production 108 MMscfd and oil 3.300 Bpd at Q2-2022
- 13. Bison-Iguana-Gajah Puteri Status : Under Construction Production gas
  Bison : 45 MMscfd
  Iguana : 45 MMscfd
  Gajah Puteri : 73 MMscfd
  Targeted at Q3-2019

#### INTERLAND GAS PIPELINE PROJECT

The Indonesia Downstream Regulatory Body - BPH Migas, as the agency authorized to regulate gas transport pipelines, plans to auction a concession for three natural gas pipelines projects . In total, the length of the pipeline reached 1,667 kilometers with a total investment of US \$ 1.25 billion.

The details of the gas pipeline consist of:

- 1. Natuna to West Kalimantan 487 km
- 2. West Kalimantan-Central Kalimantan 1,018 km
- 3. Central Kalimantan-South Kalimantan 162 km.

If these three segments have been built by investors, then the pipeline then will be connected to the natural gas pipeline network from Kalimantan-Java (Kalija), which kalijaga was previously in development planning by another investors. So that later the three main islands in Indonesia (Sumatra, Java and Kalimantan) will be connected to the gas pipeline network.

#### REFINERY PROJECT

State owned oil and gas company Pertamina, plans to double the production of its refineries by 1.57 million barrels per day (Bpd), from current production of 853.000 bpd.

The projects to double the production raye includes 4 Refinery Development Master Plans (RDMP) or development of existing refineries. And build 2 new refineries or New Grass Root Refinery (NGRR).

The refineries that will be modified to produce more are In the Dumai, Cilacap, Balikpapan and Balongan refineries. As for the construction of a new refinery are the Tuban refinery and the Bontang refinery. All six refineries will be completed entirely by 2023. The investment value of the project are:

- 1. The Dumai refinery is US \$ 4.2 billion
- 2. Cilacap refinery is US \$ 6 billion
- 3. Balikpapan refinery is US \$ 5.3 billion
- 4. Balongan refineries of US \$ 1.2 billion
- 5. Tuban refinery is US \$ 13 billion
- 6. Bontang refinery US \$ 8 billion

#### 1.3.1.2. Mining

Mining in Indonesia is a big business of searching, investigating, mining, processing, selling minerals and rocks, that have economic significance.

#### CLASSIFICATION

#### Group A

Is a type of mine that has strategic value for the security of the country, for example: the extraction of energy sources namely coal, petroleum, uranium.

#### Group B

It is a mine that has a vital value and affects the lives of many people, such as iron, nickel, gold, copper, etc.

#### Group C

Is that intended for industrial materials such as limestone, andesite, marble, quartz, etc.

#### COAL

Indonesia has 26.2 billion tons of coal reserves.

The production reaching 461 million tons per year.

The main producing areas of coal are Southern Sumatera and Kalimantan, especially East Kalimantan and South Kalimantan. The following is a list of the 10 largest coal mining companies in Indonesia;

- 1. Kaltim Prima Coal: 60 million tons
- 2. Adaro Indonesia: 50 million tons
- 3. Berau Coal: 33 million tons
- 4. Kideco Jaya Agung: 32 million tons
- 5. Arutmin Indonesia: 28.8 million tons
- 6. Bukit Asam: 25.5 million tons
- 7. Borneo Indobara: 17.3 million tons

- 8. Indominco Mandiri: 13 million tons
- 9. Antang Mount Meratus: 7.7 million tons
- 10. Indexim Colaindo: 6 million tons

Indonesia is the largest exporter of coal with a thermal type (used to fuel steam power plants). Coal is transported using either trains (southern Sumatera), or via tug and barge through rivers in Kalimantan. Then transhipment to a large ship by using floating crane.

#### GOLD

Indonesia is one of the largest gold producers in the world. Here are the 6 biggest gold mines in Indonesia :

1. Grasberg (Papua)

It has been mined since the 1970s and the remaining gold reserves are still around 22 million ounces of gold. This gold mine located in Papua is managed by a USbased company, Freeport Mcmoran. This mine is the world's largest gold mine and the world's third largest copper mine. Freeport is able to produce approximately 1.2 million ounces of gold each year.

2. Tujuh Bukit, Banyuwangi (East Java)

New mining activities began in 2016 with gold reserves of 28 million ounces of gold, the Tujuh Bukit mine or better known as Tumpang Pitu is the second largest in Indonesia and is among the largest in the world. This mine is managed by PT BSI (Bumi Suksesi Indo) which is a subsidiary of Merdeka Copper Gold.

 Batu Hijau, Sumbawa (West Nusa Tenggara) The remaining gold reserves are 2 million ounces of gold. This mine was initially managed by PT Newmont Nusa Tenggara since 2000. Now the national company Medco group take over as the owner of this mine.

# 4. Martabe, Tapanuli Selatan (North Sumatra) The remaining gold reserves are 4.8 million ounces of gold and 40 million tons of silver. Operated by PT. Agincourt Resches. One of the company's shareholders is Budi and Michael Hartono, the richest person in Indonesia. This mine has produced 3 million ounces of gold and 32 million ounces of silver since it began in 2013.

# 5. Gosowong, Halmahera (Maluku Utara) The remaining gold reserves are 1.6 million ounces of gold. This mine, which is located in North Maluku, has been operating since 1997. This mine is managed by a partnership by Newcrest (Australia) and the state company Aneka Tambang Tbk. For approximately 18 years, the company has dredged more than 6 million ounces of gold. Every year, it is able to produce around 270.000 ounces of gold.

# 6. Pongkor Bogor (West Java)

The remaining reserves are 1.6 million ounces of gold. The production of gold and silver was carried out by the state company Aneka Tambang Tbk (ANTAM) which began in 1994.

ANTAM also operates mine near the Pongkor area, which is at the location of the Cibaliung (Banten) gold mine with also large reserves.

#### NICKEL

Indonesia is known to have huge reserves and good also quality, of the world class nickel deposits.

The largest reserves are in Central Sulawesi,

Southeast Sulawesi, North Maluku and West Papua.

The following are mining companies that explore and exploit nickel :

 PT Stargate Pacific Resource Smelter Builder Company : PT Stargate Pacific Resource Location : Konawe, Southeast Sulawesi Status : On progress

- PT Bintang Delapan Mineral, Smelter Builder Company : PT Sulawesi Mining Investment (SMI) Location : Morowali, Central Sulawesi Status : Operation production
- 3. PT Bintang Delapan Energi Smelter Builder Company : PT Sulawesi Mining Investment (SMI) Location : Morowali, Central Sulawesi Status : Operation production
- PT. Bhineka Sekarsa Adidaya
   Smelter Builder Company : PT Bhineka
   Sekarsa Adidaya
   Location : Kolaka, Southeast Sulawesi
   Status : On progress
- 5. PT Trimegah Bangun Persada, PT Gane Permai Sentosa, PT Kemakmuran Pertiwi Tambang Smelter Builder Company : PT Megah Surya Pertiwi Location : Halmahera, North Sumatra Status : On progress
- PT Genba Multi Mineral Smelter Builder Company : Mingzhu International Co., Ltd Location : Morowali, Central Sulawesi Status : On progress
- 7. PT Hengjaya Mineralindo Smelter Builder Company : Mingzhu International Co., Ltd Location : Morowali, Central Sulawesi Status : On progress

 PT PAM Mineral Smelter Builder Company : PT PAM Metalindo Location : Morowali, Central Sulawesi Status : On progress

9. PT Rimba Kurnia Alam, PT Warna Tiara Persada Smelter Builder Company : PT Multi Baja Industri Location : Tuban (Smelter); North Maluku (Ore) Status : Halt

| 10. | PT Fajar Bhakti Lintas Nusantara                 |
|-----|--|
|     | Smelter Builder Company : PT Fajar Bhakti        |
|     | Lintas Nusantara                                 |
|     | Location : Gebe, North Maluku                    |
|     | Status : Operation production                    |
| 11. | PT Mulia Pacific Resources,                      |
|     | PT Itamatra Nusantara                            |
|     | Smelter Builder Company : COR                    |
|     | (Central Omega Resources) Indonesian Industry    |
|     | Location : Morowali, Central Sulawesi            |
|     | Status : On progress                             |
| 12. | PT Bumi Konawe Abadi                             |
|     | Smelter Builder Company : COR (Central Omega     |
|     | Resources) Indonesian Industry                   |
|     | Location : Morowali, Central Sulawesi            |
|     | Status : On progress                             |
| 13. | Solway Group                                     |
|     | Smelter Builder Company : PT Aquila              |
|     | Sponge Nickel                                    |
|     | Location : Morowali, Central Sulawesi            |
|     | Status : On progress                             |
| 14. | PT Wijaya Indo Mineral,                          |
|     | PT Sriwijaya Raya                                |
|     | Smelter Builder Company : PT Riota               |
|     | Jaya Lestari                                     |
|     | Location : Konawe, Southeast Sulawesi            |
|     | Status : On progress                             |
| 15. |  |
|     | Smelter Builder Company : PT Bima Cakra          |
|     | Perkasa Mineralindo                              |
|     | Location : Morowali, Central Sulawesi            |
| 4.6 | Status : On progress                             |
| 16. |  |
|     | Smelter Builder Company : PT Cipta               |
|     | Djaya Surya                                      |
|     | Location : Konawe, Southeast Sulawesi            |
|     | Status : On progress                             |
| 17. | 8  |
|     | Smelter Builder Company : PT Asia Mineral Mining |
|     | Location : Kolaka, Southeast Sulawesi            |
|     | Status : On progress                             |

#### 18. PT Macika Mada Madana

Smelter Builder Company : PT Macika Mineral Industri Location : Konawe, Southeast Sulawesi Status : On progress

#### **19. PT Bososi Pratama**

Smelter Builder Company : PT Bososi Pratama Location : Konawe, Southeast Sulawesi Status : On progress

20. PT Karyatama Konawe Utara Smelter Builder Company : PT Karyatama Konawe Utara Location : Konawe, Southeast Sulawesi Status : On progress

#### 21. Billy Group

Smelter Builder Company : PT Jilin Metal Indonesia Location : Bombana, Central Sulawesi Status : On progress

- 22. PT Aneka Tambang FeNi Haltim Smelter Builder Company : PT Aneka Tambang Tbk Location : Halmahera, North Sumatra Status : On progress
- 23. PT Nusajaya Persadatama Mandiri Smelter Builder Company : PT Nusajaya Persadatama Mandiri Location : Morowali, Central Sulawesi Status : On progress
- 24. PT Kembar Emas Sultra Smelter Builder Company : PT Sultra Gold Twins Location : Konawe, Southeast Sulawesi Status : On progress
- 25. PT First Pacific Mining Smelter Builder Company : PT First Pacific Mining Location : Halmahera, North Sumatra Status : On progress
- 26. PT Mapan Asri Sejahtera Smelter Builder Company : PT Mapan Asri Sejahtera Location : -

Status : On progress

- 27. PT Bintang Timur Steel Smelter Builder Company: Location : Serang, Banten Status : Operation production
- 28. PT Ang and Fang Brothers Smelter Builder Company : PT Ang and Fang Brothers Location : Morowali, Central Sulawesi Status : On progress
- 29. PT Gebe Sentra Nikel Smelter Builder Company : Location : Gresik, East Java Status : Operation production
- **30. PT Integra Mining Nusantara** Smelter Builder Company : PT Integra Mining Nusantara Location : Konawe, Southeast Sulawesi Status : Halt
- **31. PT Bola Dunia Mandiri** Smelter Builder Company : PT Bola Dunia Mandiri Location : Kolaka, Southeast Sulawesi Status : On progress
- 32. PT Cinta Jaya Mining
   Smelter Builder Company :
   PT Cinta Jaya
   Location : Mandiodo, Central Sulawesi
   Status : On progress
- 33. PT Putra Mekongga Sejahtera
   Smelter Builder Company : PT Putra Mekongga
   Sejahtera
   Location : Pomala, Central Sulawesi
   Status : On progress
- 34. PT Sambas Mineral Mining
   Smelter Builder Company : PT Sambas Mineral Mining
   Location : Konawe, Southeast Sulawesi
   Status : On progress

# **35. PT Aneka Tambang Pomala** Smelter Builder Company : PT Aneka Tambang Tbk Location : Kolaka, Southeast Sulawesi Status : Operation production

#### 36. PT Pernick Sultra

Smelter Builder Company : PT Pernick Sultra Location : Pomala, Central Sulawesi Status : On progress

- 37. PT Surya Saga Utama Smelter Builder Company : PT Surya Saga Utama Location : Bombana, Central Sulawesi Status : On progress
- 38. PT Cahaya Metal Modern Industri Smelter Builder Company : PT Cahaya Metal Modern Industri Location : Konawe, Southeast Sulawesi

Status : Operation production

- **39.** PT Konawe Nikel Nusantara Smelter Builder Company : PT Elit Kharisma Utama Location : Konawe, Southeast Sulawesi Status : On progress
- PT Elit Kharisma Utama **40.** Smelter Builder Company : PT Elit Kharisma Utama Location : Konawe, Southeast Sulawesi Status : On progress
- 41. PT Anugerah Sakti Utama Smelter Builder Company : PT Anugerah Sakti Utama Location : Pagimana, Central Sulawesi Status : On progress
- 42. PT Morindo Bangun Sejahtera Smelter Builder Company : -Location : Morowali, Central Sulawesi **Status : Production Operation**
- PT Mulia Pacific Resources, PT Itamatra Nusantara, 43. PT Bumi Konawe Abadi

Smelter Builder Company : PT Macrolink

Omega Adiperkasa

Location : Morowali, Central Sulawesi

Status : On progress

44. PT Century Metalindo Smelter Builder Company : PT Century Metalindo Location : -

Status : On progress

- **45. PT Huadi Nickel Alloy Indonesia** Smelter Builder Company : -Location : Bantaeng, South Sulawesi Status : Invest 1.7 Trillion
- 46. PT Titan Mineral Utama Smelter Builder Company : -Location : Bantaeng, South Sulawesi Status : Invest 4.7 Trillion for 20 Blast Furnace furnace

#### VALE INDONESIA (EX INCO)

Is a subsidiary of a global mining company headquartered in Brazil. Previously was PT International Nickel Indonesia Tbk. (INCO). Vale operates open pit nickel mines and processing plants covering 118,439 hectares in Sorowako, Bahodopi (Central Sulawesi), and Pomalaa (Southeast Sulawesi).

Currently, it is the largest Indonesia nickel producer and accounts for 5% of the world's nickel supply. It mines laterite and saprolite type of nickel and processing it into nickel matte, which is exported to Japan. Vale's processing powered by electricity generated from three hydro power plants (hydro) of total capacity 365 MW. The annual production rate is 75,000 metric tons of nickel matte.

#### **PRODUCTION FACILITIES**

Besides having three unit with total 365 MW hydropower plants, Vale's processing plant in Sorowako has three oil-fired drying furnaces, five oil-fired reducing furnaces, four electric furnaces, and three Pierce-Smith converters. It has also built port and road infrastructure to ship the final product, and has oil fuel terminal logistics at Mangkasa Point.

With a further investment of US \$ 2 billion, it targets an annual production increase to 120 thousand metric tons of nickel matte in the next five years.

#### ANEKA TAMBANG (ANTAM)

ANTAM is a mining state owned company with several commodities. One of ANTAM's business line is ferronickel and nickel ore. Which is produced from nickel mines in Southeast Sulawesi and North Maluku. And then processed in ferronickel factories in Southeast Sulawesi (and North Maluku in the future).

ANTAM operates two nickel mines in Pomalaa and Tapunopaka (Southeast Sulawesi), one mine in Buli (North Maluku). Then it has a ferronickel processing plant in Pomalaa, Southeast Sulawesi.

ANTAM's saprolite type nickel ore reserves and resources reached 361 million wet metric tons (wmt) and limonite resources reached 464 million wmt for limonite types. Nickel ores are mined using open pit methods. After being mined, nickel ore is processed into ferronickel (about 80% iron content and 20% nickel).

Ferronickel is sold in pellets to stainless steel producers in Europe and Korea. About 70% of nickel consumption is used for the stainless steel industry, while the rest is used for various industries such as batteries and electronics.

ANTAM has three ferronickel factories namely FeNi I, FeNi II and FeNi III. The installed capacity of the three factories is 26,000 tons of Ni with electricity needs of 42 MW.

The phyrometallurgical technology used requires large energy and a consistent electricity supply.

#### ANTAM PROJECT

The main projects currently include:

- Project for Expansion of Pomalaa Ferronickel Plant (P3FP). To increase ferronickel production capacity from 18,000 tons of Ni to 30,000 tons of Ni. Investment Value of US \$ 600 Million. This starts to commercial operations.
- 2. Project for Development of East Halmahera Ferronickel Plant (P3FH) in North Maluku. Meruoaman has a nickel ore processing plant into ferronickel with a capacity of 13,500 Ni Tons. Value of Investment Rp. 3.5 trillion (not including power plant). The estimated capacity is 13,500 TNi per year. Status in EPC construction by PT Wijaya Karya (Persero) Tbk and Kawasaki Heavy Industries. The construction of the PLTU power plant separately will be carried out by PT Bukit Asam (Persero) Tbk with a capacity of 80 MW.

#### TIN

Indonesia's tin reserves have been even exploited before independence. And continues now with being managed by a state-owned company, Timah Tbk. Its reserves reach 1.1 million tons. The largest reserves are in Bangka Belitung, which is 801,000 tons. While in the Riau Islands there were 328,000 tons.

#### **MINING OPERATION**

Timah Tbk conducts tin mining operations on land and at sea. On land mining activities are carried out by companies in the area of the Mining Business License (IUP) located in most of the islands of Bangka and Belitung and the Riau Islands.

The alluvial mining process uses a spray pump method (gravel pump). For offshore mining, the company operates dredgers with Bucket Line Dredges with bowl sizes ranging from 7-24 cubic feet and can operate from 15 to 50 meters below sea level with the ability to dig up to more than 3.5 million cubic meters of material each month.

To increase production capacity at sea, it also builds suction vessels with the ability to dig 25 meters below sea level. So that, it can reach the remaining reserves of tin reserves at sea. The development of a new generation of Bucket Wheel Dredges will replace old type dredgers (Bucket Line) which has the ability to dig around 70 meters below sea level.

#### **SMELTING**

Processing and smelting of tin ore is processed at

the washing facility followed by refining using crystallizer and electrolytic refining. In the smelting process, the company operated 12 kilns, of which 1 furnace was in the Kundur area (Riau), and 11 furnaces were in Mentok, (Bangka).

The final outuput product is in in the form of beams or bars. Besides that, tin metal can also be formed according to customize request and has a trademark listed on the London Metal Exchange (LME).

# 1.3.1.3. Geothermal

Geothermal energy resources in Indonesia are estimated at around 28.5 Giga Watt electrical (GWe). Indonesia one known as of the largest geothermal resources in the world. This potential is spread in 331 points.

Currently the geothermal resources utilized have reached 1,948.5 MW consisting of 13 Geothermal Power Plants (PLTP) in 11 Geothermal Work Areas. In 2018 there is additional capacity added with the operation of a 30 Megawatt Unit I Geothermal Power Plant (PLTP) Karaha Unit I and a Sarulla III PLTP of 110 Megawatts.

Then it followed at the end of 2018, Sorik Marapi Modullar I PLTP with a capacity of 20 Megawatts and unit II with a capacity of 30 Megawatts. Also the Balai Unit I PLTP has a capacity of 55 Megawatts.

#### GEOTHERMAL WORKING AREA

At present, there are three Geothermal Working Area (WKP) proposal offers from investors, namely Lake Ranau, Oka Ille Ange and Gunung Sirung. In addition, there are 9 areas of preliminary and exploration survey assignments, namely in Graho Nyabu, Tanjung Sakti, Sekincau, Mount Hamiding, Simbolon Samosir, Geureudong, Hu'u Daha, Pentadio and Cubadak.

#### **INVESTMENT 2018**

Investment in Indonesia's geothermal sector is increasing for the next year. The reason is because of high investment from six exploration companies and the special assignment to PT Perusahaan Listrik. The investment could reach US \$ 416 million. There are US \$ 147 million for preliminary surveys and exploration of six companies, while US \$ 269.8 million is an investment of government through special assignment to national electricity state owned company (PLN) :

- Star Energy, which will work on geothermal areas in Hamiding Mount, North Halmahera Regency, North Maluku Province. The investment plan is around US \$ 23.69 million. In addition to Hamiding, Star Energy will also explore South Suoh Sekincau area, West Lampung Regency, West Lampung Province. The investment plan is US \$ 15.53 million.
- 2. PT Hitay Energy, will work on the (Tanjungsakti area, Empat Lawang District, Lahat Regency, Pagar Alam City) and, Bengkulu (South Bengkulu Regency, and Seluma Regency). The investment plan is US \$ 6.18 million. Hitay Energy will also work on the Aceh (Geureudong area, Bener Meriah Regency, Central Aceh District and Aceh Utara District). The investment plan is US \$ 29.25 million.
- PT EDC Indonesia, which will work on the area of Bengkulu (Graho Nyabu, Merangin Regency, Kerinci Regency Jambi Province; and Muko-muko Regency). The investment plan is US \$ 10,057 million.
- PT Optima Nusantara Energy works on the North Sumatra (Simbolon Samosir area, Dairi Regency, Samosir Regency, Humbang Hasundutan Regency, North Tapanuli Regency, Toba Samosir Regency, Asahan Regency, Simalungun Regency and Karo Regency). The investment plan is US \$ 39.5 million.
- PT Sumbawa Timur Mining is working on the area of West Nusa Tenggara (Hu'u Daha, Dompu Regency, and Bima Regency).

The investment plan is US \$ 11.574 million.

 PT Ormat Geothermal Indonesia undertook exploration in the North Sulawesi (Klabat Wineru area, North Minahasa Regency and Bitung City). The investment plan is US \$ 11.19 million.

#### ASSIGNMENT

The geothermal working project area that will be assigned to be operated by PLN is in the Oka Ile Ange area in East Flores Regency, East Nusa Tenggara Province. There, PLN will develop a 2x2.5 Megawatt (MW) plant. The investment plan is US \$ 31.7 million.

Another area that PLN will work on (2x5 MW) is Gunung Sirung, Alor Regency, East Nusa Tenggara Province. Investment plan of US \$ 48.6 million.

PLN will also work on geothermal working areas in the area of Lake Ranau, West Lampung Regency (Lampung Province) and South Ogan Komering Ulu Regency (South Sumatra Province). The capacity is 20 to 40 MW. Plans to operate commercially 2024 or 2025.

The investment plan is US \$ 189.5 million.

#### PERTAMINA GEOTHERMAL ENERGY (PGE)

Besides PLN, another state-owned company is also preparing to increase production of geothermal steam for electricity generation. It is Pertamina Geothermal Energy (PGE) has set aside US \$ 302 million to invest.

The investment includes the addition of the number of wells that PGE will drill throughout 2018. The total geothermal wells that will be drilled by PGE this year reach 20 wells in several geothermal working areas such as Ulu Lais, Lahendong, Kamojang, Lumut Balai, and Ulu Belu.

In many fields, PGE is only covers upstream (geothermal wells), as the downstream part the power plant is built by the state clay company (PLN).

# **1.3.2.** Power Plant, Transmission & Distribution.

Electricity in Indonesia is provided by PLN as a State-Owned Enterprise (BUMN). As for private investors, they can participate in the power plant side. This is where the electricity is then sold to PLN through a PPA (Power Purcahse Agreement).

#### 1.3.2.1. 35.000 MW

This private power plant is known as the IPP Independent Power Producer. Electricity, whether produced by PLN's own power plants or IPP's, is then fully transmitted through the PLN transmission and substations to customers. Seeing the high demand for national electricity which is estimated to reach 244,000 MW by 2020, the Indonesian government in 2014 launched a 35.000 MW program for the five years 2014-2019. The plan is to build a mix of electricity power with a total capacity of 35.000 MW, a transmission network of 46.000 kilometers of circuits and a substation with a total capacity of 109.000 MVA.

The progress of this project in early 2018, the capacity of power plant which fully operational is 2.800 MW. This consists of PLN owned 466 MW and 2.334 MW by IPP. And for the power plants that are still under construction phase is 17.200 MW. The rest is still in the preparation stage for finalizing the contract of sale and purchase of electricity, procurement and engineering

#### PROJECT VALUE

The power plant that was built was dominated by coal steam power. For all the 35.000 MW plan, it is estimated that investment requires US \$ 72.94 billion, for building 291 unit power plants, 732 transmission sets, 1,375 substation units.

From the total, the project that is being worked on by PLN itself only 5,000 Megawatts, while the rest are by Independent Independent Power Producer (IPP) with a total capacity of 30.000 Megawatts.

The government hopes that the private sector will participate in funding US \$ 62 billion or 85 % of the total project value.

#### TRANSMISSION & DISTRIBUTION

While the transmission network that has been completely built is along the 9,000 Km circuit. Which is in the construction phase is 20.600 Km of the circuit. and in the pre-construction process along the 16.400 km circuit.

For the substation, from a total plan of 109.000 MVA, the total construction of 38.000 MVA has been completed built. Whereas the construction phase was 47.500 MVA, and those still under pre-construction were 33.500 MVA.

# 1.3.2.2. Solar Power Plant

Conditions in Indonesia strongly support the development of solar-power. This is because the intensity of solar radiation in Indonesia is relatively high and stable, so the solar module gets optimal power throughout for the full year.

The government itself is encouraging the development of clean energy solar power, and at the same time that is overwhelmed by the continued decline in the price of solar panels and storage (batteries).The target capacity of photovoltaic solar power plants (PLTS) in 2025 is 6,400 Megawatts (MW). At present, the installed capacity of PLTS is only 80 MW.

So there are still very broad to be achieved. In the investment and construction of solar power plants (PLTS), the government giving authority to private developers to develop PLTS according to the location planned by the government or by the state electricity company (PLN).

The government said that the solar power plant (PLTS) currently has not shown enough development.

Even so, the price is considered to be more competitive. Therefore, this moment should be able to make solar power plants to grow rapidly in the future.

#### THE PROJECT

The solar independent power producer, that produces solar electricity to be sold to the government, is carried out through an auction mechanism. It allows the private sectors offering the best electricity selling price.

In 2017 the auctioned for IPP scheme has a total capacity of 167.58 MW.

The project is spread in :

- 1. Aceh region of 20 MW,
- 2. North Sumatra 35 MW,
- 3. Riau,
- 4. Riau Islands, and
- 5. Bangka Belitung 39 MW,
- 6. West Sumatra 16 MW,
- 7. South Sumatra,
- 8. Jambi
- 9. Bengkulu 33 MW
- 10. Lampung 25 MW.

One that already succesfully operates as independent power producer (IPP) is LEN Industri, with a capacity of 5 MW (PLTS) located in the village of Oelpuah, Central Kupang, East Nusa Tenggara with an investment of US \$ 7.5 million. And this will continue with other locations, such as the construction of solar power generator (PLTS) with a total capacity of 45 MW in some areas. Such as 4 units will be built (5 MW each) in Lombok (West Nusa Tenggara), then 1 unit in Gorontalo 10 MW, and 1 unit in Minahasa 15 MW. Besides that, PT Pembangkitan Jawa Bali (PT PJB) also to enter into a cooperation contract with Masdar, an energy company from Abu Dhabi, United Arab Emirates.

Masdar and PJB will work together to work on the 200 MW Floating Photovoltaic Solar Power Plant (PLTS) project in the Cirata Reservoir (dam), West Java Province.

The investment value of this project reaches US \$ 180 million, expecting generate the income from selling electricity is around US \$ 23 million per year.

And one of the most another interesting thing is to developed roof top solar panel system. This will give a boom in the solar panel industry and storage (battery) demand.

There have been many roof top solar panel installed in government buildings and also airports and stations. Just following later then the household.

# 1.3.2.5. Hydro Power Plant

Indonesia has huge potential to develop large hydro renewable energy. Hydro energy is cheap and also very environmentally friendly because it does not produce pollution and not produce greenhouse gases.

Hydropower potential in Indonesia reaches 75,000 MW. Currently, the installed capacity of hydro-based power plants reaches 4.755 MW, or only 4% of its potential.

#### SOME PROJECTS

Here are some hydro power plants (PLTA) that are currently on progress :

- 1. Upper Cisokan power plant (pumped storage hydro) (COD 2015) **Operator: PT. PLN** Location: Cianjur Cisokan river and Cirumamis river at regency Cianjur and West Bandung (West Java) Capacity per Unit (MW): 4 x 260 MW pump turbine 4 x 275 MVA motor generator Installed Capacity (MW): 1,040 MW pump turbine or 1,100 MVA motor generator 2. Matenggeng power plant (pumped storage hydro) **Operator: PT. PLN** Location: Majenang, Cijolang river and Cimancing river regency Ciamis (West Java) Capacity per Unit (MW): 2 x 443 MW pump turbine or 2 x 460 MVA motor generator Installed Capacity (MW): 886 MW pump turbine or 920 MVA motor generator 3. The Grindulu power plant (pumped storage hydro) Location: Tegalombo regency Pacitan (East Java) Capacity per Unit (MW): 4 x 260 MW pump turbine or 4 x 75 MVA motor generator Installed Capacity (MW): 1,040 MW pump turbine
  - Or 1,100 MVA motor generator

 The power plant of Konto (pumped storage hydro) Location: Bandar Kedungmulyo regency Jombang (East Java)

Capacity per Unit (MW): 4 x 260 MW pump turbine or 4 x 275 MVA motor generator Installed Capacity (MW): 1,040 MW pump turbine or 1,100 MVA motor generator

5. Lake Toba power plant (pumped storage hydro) Operator: PT. PLN Location: Toba regency Toba Samosir (North Sumatra) Capacity per Unit (MW): 4 x 110 MW pump turbine or 4 x 125 MVA motor generator Installed Capacity (MW): 4900 MW pump turbine or 500 MVA motor generator

#### HUGE CAPACITY INVESTMENT

China is interested in investing hydroelectric power plants (PLTA) utilizing the potential of rivers in North Kalimantan. The investment value is estimated at US \$ 17 billion or around Rp 229 trillion. The potential of hydro to generate electricity in North Kalimantan reaches 11,000 megawatts.

Meanwhile at west java, the construction of the Jatigede hydropower plant with a capacity of 2x55 Megawatts (MW) has entered the construction phase. The plan, the project with an investment of US \$ 140 million will be completed in 2019. For this work, PLN cooperated with a consortium of PT Pembangunan Perumahan Tbk and Sinohydro.

Overall, the government has invited the private sector to build hydropower plants in 18 dams and reservoirs under government control.

Some of the dams and reservoirs include:

- 1. Jatigede, West Java.
- 2. Lodoyo, East Java
- 3. Berjaya, Riau
- 4. Jatibarang, Central Java.

# 1.3.2.6. Mini Hydro Power Plant

According to one survey, there are 266 potential mini hydro power plants (PLTMH) with a total capacity of 1,200 MW. This is because of the large number of river and small rivers in Indonesia. Until now the realization of the construction for the mini hydro power plant is still very small. Even do not reach 50 units has finished construction. The rest is still in the power purchase agreement process, and many more even are just at the proposal submission stage.

So that the potential for development is still very large.

#### MINI HYDRO PROJECTS

There are some have been on progress:

- Mini Hydro Power Plant Project in West Pasaman District, West Sumatra. Its capacity is 6 Megawatts (MW) from the Tongar Mini Hydro Power Plant. This project will be carried out by PT Inti Duta Energi. This is targeted to operate in 2021.
- 2. Mini Hydro Project In North Sumatera. Japan is interested in investing renewable energy power projects. The Investment Coordinating Board (BKPM) received an interest in investment from Japan valued at USD 75 million or equivalent to Rp 1.04 trillion to build mini hydro power plants at 15 points in Indonesia. In the initial phase, investors will build two mini hydro projects in North Sumatra with a value of USD 15 million with a capacity of 7.8 MW and 8.2 MW.
- Cirompang Mini Hydro Power Plant (PLTMH), located in Garut Regency. Has a capacity of 8 Mega Watts. The investment reaches Rp 172 billion.
- 4. PT Tirta Gemah Ripah (Tirta Jabar), installed two power plant with a capacity of 8 and 9 MW
- Four mini hydro power plants (PLTMH) will be built in Mamuju, West Sulawesi with a total capacity of 8 MW.
- Construction of Sapaya MHP in South Sulawesi. The project was carried out by independent power producer PT Sumberdaya Sewatama, With an investment of Rp. 132 billion with a capacity of 5 MW.

# 1.3.2.7. Wind Power Plant

Indonesia has the potential for wind as an energy source. Several regions have been surveyed and are ready to be developed as wind energy fields.

#### WIND ENERGY POTENTIAL

Based on the analysis that has been carried out, the wind energy field with electricity potential above 100 MW is located at :

- 1. Sukabumi West Java (170 MW)
- 2. Garut West Java (150 MW)
- 3. Lebak and Pandeglang West Java (150 MW)
- 4. Lombok West Nusa Tenggara (100 MW).

Other regions also have the potential for wind energy fields, although not more than 100 MW. Some of the regions are Gunung Kidul (10 MW), Bantul (50 MW), East Belitung (10 MW), Tanah Laut (90 MW), Selayar (5 MW), Buton (15 MW), Kupang (20 MW), Timur Tengah Selatan (20 MW), and East Sumba (3 MW). Then, Ambon (15 MW), Kei Kecil (5 MW) and Saumlaki (5 MW). Meanwhile, currently there are only 2 wind energy field projects ready. One of them is already operating namely the Sidrap Power Plant (PLTB) with a capacity of 75 MW. After Sidrap, which will be inaugurated later is the Wind Power Plant in Jeneponto. The 72 MW power plant will be inaugurated at end of 2018.

#### SIDRAP AREA

In the Wind Power Plant area Sidrap (South Sulawesi), has been built Wind Turbine Generator (WTG) or windmill as many as 5 turbines. Later this PLTB will have a total of 30 windmill. Construction of the Sidrap maintenance and technical center building has also been completed. The windmill project is developed by US investors, UPC Renewables, in collaboration with PT Binatek Energi Terbarukan. It was signed in August 2015, the completion of the PLTB was in February 2018 with investment of US\$ 150 million.

#### JENEPONTO AREA

Besides Sidrap, it also soon completed construction of the Tolo I Wind Power Plant in Jeneponto (South Sulawesi). It has a capacity of 72 MW and has 20 turbines with each plate with a capacity of 3.6 MW.

Investors are PT Redaya Energy Pte & PT Global Pacific Energy Consortium worth US\$ 160 million. It is targeted commercial operation date (COD) in November 2018.

# 1.3.2.8. Coal Steam Fired Power Plant

The 35.000 MW projects is dominated by coal steam fired power plants (PLTU). Of the total 35,000 MW development plan, 18,000 MW of which are coal-fired power plants, the rest just use gas and new renewable energy (EBT). Among the coal power plants to be built there are ten largecapacity power plants, namely:

- 1. Jawa-5 coal steam fired power plants (PLTU) in Suralaya, Banten, with a capacity of 2,000 MW.
- Jawa-6 coal steam fired power plants (PLTU) is located in Cikarang, West Jawa with a capacity of 1,000 Megawatts (MW).
- 3. Jawa-7 coal steam fired power plants (PLTU) in Serang Banten.
- 4. Jawa-8 coal steam fired power plants (PLTU) in Cilacap, Central Jawa, with a capacity of 1,000 MW.
- 5. Jawa-9 & 10 coal steam fired power plants (PLTU) in Cilegon, Banten, with a capacity of 2,000 MW.
- 6. Indramayu coal steam fired power plants (PLTU), with a capacity of 1,000 MW.
- 7. Cirebon 2 coal steam fired power plants (PLTU), with a capacity of 2,000 MW.
- 8. Tanjung Jati B coal steam fired power plants (PLTU) in Central Jawa, with a capacity of 2,000 MW.
- 9. Tanjung Jati A coal steam fired power plants (PLTU), with a capacity of 1,320 MW.
- 10. Celukan Bawang coal steam fired power plants (PLTU) in Bali, with a capacity of 660 MW.

#### JAWA 5 STEAM POWER PLANT

This electricity generation project will be built on an area of 200 hectares (ha) located in Suralaya, Cilegon Regency, Banten. The investment value Rp. 30 trillion of the 2 × 1,000 Megawatt (MW). Power plant project will be by PT Indonesia Power. The project is expected to be finished by the end of 2019.

For the record, now in the Suralaya Steam Power Plant area, there are already numbers of power plants with total capacity 3,400 MW capacity operated by PT Indonesia Power.

#### JAWA 7 STEAM POWER PLANT

Jawa 7 Steam Power Plant capacity of 2 x 1,000 megawatts (MW) has begun construction and is planned to operate in 2019. The demand for coal reaches 7 million tons per year, will be supplied from mining company in South Sumatra.

Jawa 7 Steam Power Plant located in Serang Regency, Banten Province.

The plant was built with a scheme of independent power producer (IPP) by a consortium of China Shenhua Energy Company Limited and a subsidiary of PT Perusahaan Listrik Negara, namely PT Pembangkit Jawa.

This project has received funding from China Development Bank for the construction of the plant. The investment value needed to build the project is estimated at US \$2 billion.

The technology used in the Jawa 7 Steam Power Plant is ultra super critical boiler as a new technology in the field of low calorie coal fired generation (4,000 - 4,600 kcal / kg AR).

#### PLTU JAWA 9 & 10

The Jawa unit 9 and 10 steam power plant (PLTU) construction project in Suralaya with a capacity of  $2 \times 1,000$  Megawatts (MW) located in the regency of Cilegon, Banten Province will require an investment of Rp. 40 trillion.

This will be managed by PT Indonesia Power, a subsidiary of electricity state owned company PT PLN (Persero). At this time, Suralaya PLTU consists of eight power generation units with coal fuel.

The construction of PLTU in Suralaya for units 9 and 10 for 3 years, so it is expected to be completed in 2022.

This plant uses ultra super critical technology, so the use of fuel is 40% more efficient.

#### INDRAMAYU STEAM POWER PLANT

PT Perusahaan Listrik Negara (PLN) will build the Indramayu 2 Steam Power Plant with a capacity of 2x1,000 MW. The project is targeted to begin construction phase in 2018. The certainty of funding for the project has also been obtained from the Japan International Cooperation Agency (JICA), which will provide loans for the project with an investment value of US \$ 4 billion. PLN includes its subsidiary, PT Pembangkitan Jawa Bali, will manage the coal plant.

#### BATANG STEAM POWER PLANT

Batang Steam Power Plant need about to build an investment Rp. 54 trillion to build ultra critical steam power plant project 2 x 1,000 MW located in Batang Regency, Central Java. The Batang Steam Power Plant will be built by Bhimasena Power Indonesia this consortium consisting of J-POWER, Adaro, and Itochu. The Batang Steam Power Plant with a capacity of 2 x 1,000 MW will be completed by 2020.

#### JAWA 8 CILACAP STEAM POWER PLANT

This is a US \$ 1.4 billion steam power plant (PLTU) Cilacap Phase 2 Expansion project, with capacity 1,000 Megawatts (MW). Built on an area of 26 hectares (ha), located in the district of Cilacap, Central Java.

Cilacap Expansion Steam Power Plant is owned by Independent Power Producer, namely PT Sumber Segara Primadaya (S2P). S2P is a joint venture owned by PT Sumberenergi Sakti Prima (SSP) and PT Pembangkit Jawa-Bali (PJB).

#### TANJUNG JATI B STEAM POWER PLANT

The Tanjung Jati B Steam Power Plant expansion project has begun. Previously there were existing units of units 1 - 4 in the same area. The Steam Power Plant which is now being built are units 5 and 6, with a capacity of 2 x 1000 MW located in Tubanan Village, Jepara Regency, Central Java.

The plant will contribute 2x1,000 MW to the Java-Bali interconnection system, and will be connected to the 500 KV Tanjung Jati - Ungaran transmission line. It is estimated that the project will be completed within a period of 54 months. The unit 5 is expected to be operational by May 2021, while unit 6 will operate in September 2021.

The power plant project is managed by an independent power producer of PT Bhumi Jati Power (BJP), which supplies electricity to the national electricity company PLN.

BJP is owned by a consortium of Sumitomo Corporation, PT United Tractors Tbk, PT Astra International, and The Kansai Electric Power.

#### TANJUNG JATI A STEAM POWER PLANT

The Tanjung Jati A power plant project has an electricity capacity of 1,320 Megawatts (2 x 660 MW). The total investment required reaches US \$ 2.4 billion, The construction of this power plant is expected to take 40 months by independent power producer scheme that sells electricity to the national electricity company PLN. The investor is PT Bakrie Power who is partnering with YTL Power International Berhad from Malaysia. Now, has begun the process of pre construction, design, and land acquisition preparation.

# 1.3.2.9. Gas Power Plant

PLN as a electricity state owned company has been ascertained to get the allocation of domestic gas for its needs. But without sufficient infrastructure, the allocation will not be absorbed.

So PLN is now rushing to start preparing to build LNG gas receive facilities, namely :

- 1. Central Indonesia LNG Receiver Terminal Project
- 2. Pontianak Bangka Belitung LNG Receiver Terminal Project
- 3. Krueng Raya-Nias LNG Receiver Terminal Project
- 4. Maluku Papua LNG Receiver Terminal Project
- 5. Gorontalo FSRU Project.

#### JAWA 1 GAS POWER PLANT

Pertamina's state owned company consortium, Marubeni Corporation and Sojitz Corporation, are ready to develop the largest gas power plant in Southeast Asia, namely Java 1 Steam Gas Power Plant. It is known that this power plant integrates the Floating Storage and Regasification Unit (FSRU) as an LNG receiver with a Combined Cycle Gas Power Plant. Turbine (CCGT) with a total installed capacity of 1,760 MW.As for the investment value of US \$ 2 billion. To build this JAWA 1 power plant, the consortoum has appointed a group of contractors consist of General Electric (GE), Samsung C & T (Samsung) and PT Meindo Elang Indah (Meindo) as EPC contractors (Engineering, Procurement and Construction) for the Java-1 Combined Cycle Power Plant. The work contract value is US\$ 900 million

# 1.3.3. Infrastructure

Indonesia government nowdays very pursuit its will to accelerate building the infrastructure.Many projects that delayed or even worse, stoped at previous government, now push to accomplish.Many road, highway, bridge, dams, peple housing and public waste and sanitary favilities are built.

# 1.3.3.1. Road & Highway

The Ministry of Public Works and Public Housing (PUPR) of Indonesia, requires large funds to build the road connectivity. The required funds amounting to Rp 931 trillion between 2015 -2019. The main target is to build 2,650 km of new roads, build 1,000 km of toll roads (highway) and renewal of 3,072 km of arterial roads.

#### SUMATERA TRANS TOLL PROJECT

The Trans Sumatra toll road project is approximately 2,700 KM long, consisting of 17 toll road segments along the east coast of Sumatra that connects from Aceh (northen Sumatera island) to Bakauheni (southern Sumatera island).

The sections are auctioned by the Toll Road Regulatory Agency (BPJT) which has the authority to auction toll road concessions. In its development, the government revealed the state owned company Hutama Karya to work on Trans Sumatera Toll, with government funding support for land acquisition and equity participation.

Of the 17 segments, Hutama Karya has firstly prioritized building 11 toll roads, cost abaout Rp. 250.5 trillion.

Until June 2018, from the planned 2,700 km of Trans Sumatra toll road, has been built and inaugurated only 82 km long. There is still a huge investment to complete it.

#### INITIATIVE PRIVATE TOLL

In addition to the toll roads concession being auctioned by the concession, there are also another scheme that initiated by the private sector.

In 2018, there are 38 segments interest in toll road private initiatives. This comes from existing and non existing toll investors, including PT Citra Marga Nusaphala Persada (CMNP), PT Nusantara Infrastructure (META) Tbk, PT Astratel Nusantara, PT Translingkar Kita Jaya and Sinarmas Land.

There are includes several companies as new players, who are interested in initiating because their business activity are still related to the construction services.

The following are a list of the Initiative Toll Roads :

- 1. Karawang–Sadang (PT Jasa Marga Tbk)
- 2. Kendal–Banyumanik (PT Jasa Marga Tbk)
- 3. Tegal–Cilacap (PT Jasa Marga Tbk)
- 4. Harbour Toll Road Semarang (PT Jasa Marga Tbk, PT Pembangunan Perumahan Tbk & PT Nindya Karya Tbk)
- 5. Gedebage–Majalaya (PT Jasa Marga Tbk & PT Jasa Sarana)
- 6. Jakarta–Cikampek II Selatan (PT Jasa Marga Tbk, & PT Wira Nusantara Bumi)
- Akses Pelabuhan Patimban (PT Jasa Marga Tbk, PT Daya Mulya Turangga & PT Jasa Sarana)
- 8. Bandung Outer Ring Road (PT Jasa Marga Tbk, PT Adhi Karya Tbk., PT Jasa Sarana & PT Daya Mulya Turangga)
- 9. Gedebage–Tasikmalaya–Cilacap (PT Jasa Marga Tbk. & PT Daya Mulya Turangga)
- 10. Tomang–Pluit–Bandara Soekarno Hatta (PT Jasa Marga Tbk., PT Toll Square Jakarta & PT Waskita Toll Road)
- 11. Demak–Tuban–Gresik (PT Jasa Marga Tbk Tbk. & PT Waskita Toll Road)
- 12. Malang–Kepanjen (PT Waskita Toll Road)
- 13. Singosari–Batu (PT Waskita Toll Road)
- 14. Dramaga–Caringin (PT Waskita Toll Road)
- 15. Bawen–Yogyakarta (PT Waskita Toll Road)
- 16. Penajam Paser–Balikpapan (PT Waskita Toll Road)
- 17. Mojokerto–Mojosari–Gempol (PT Waskita Toll Road & PT Pembangunan Perumahan Tbk)

- Makassar–Maros (PT Waskita Toll Road dan PT Marga Utama Nusantara)
- 19. Citeureup–Bojong Gede–Legok (PT Citra Marga Nusaphala Tbk. & PT Seralin Tata Mandiri)
- 20. Bojonggede–Yasmin–Ciawi (PT Citra Marga Nusaphala Persada Tbk.)
- 21. Bojong Gede–Dramaga–Caringin (PT Citra Marga Nusaphala Persada Tbk)
- 22. Jagorawi–Cianjur–Tol Cikampek (PT Jasa Sarana)
- 23. Akses Gedebage (Dalam Kota) (PT Jasa Sarana)
- 24. Gasibu–Ujungberung–Soekarno Hatta (PT Wijaya Karya Tbk)
- 25. Ujungberung–Cisumdawu (Fase 2) (PT Wijaya Karya Tbk)
- 26. Sentul Selatan–Karawang Barat (PT Pamapersada Nusantara)
- 27. Bogor–Serpong Via Parung (PT Pamapersada Nusantara)
- 28. Juanda–Gempol (JLT Sidoarjo) (PT Surya Majapahit Marga Wisata)
- 29. Sukorejo–Batu–Kediri (PT Surya Majapahit Marga Wisata & PT Brantas Abipraya)
- 30. Kamal–Teluk Naga–Rajeg (PT Duta Graha Karya)
- 31. Balaraja–SemananPT Delta Mega Persada
- Citeurep–Cikarang (PT Pratiwi Putri Sulung, PT Tri Mitra Infrastruktur, PT Conbloc Infratecno & PT Perentjana Djaja)
- 33. Ruas Cikunir–Karawaci (PT Earth Invesment Indonesia, China Railway Group of Companies & perusahan afiliasi)
- 34. Cilacap–Yogyakarta–Solo (PT UEM Group Berhad & PT Daya Mulya Turangga)
- 35. Gilimanuk–Tabanan (PT Margi Sarana Utama)
- 36. Kulonprogo–Yogyakarta–Solo (PT Pembangunan Perumahan Tbk)
- 37. Gresik–Lamongan–Babat (PT Margabumi Matraraya)
- 38. Serpong–Maja (PT Hanson Infrastucture International)

# 1.3.3.2. Bridge

Ministry of Public Works and Public Housing during 2015 - 2018 period has built 530 bridges with the total length of 34.400 meter. The presence of bridge infrastructure, flyovers and underpas not only in smoothing the flow of traffic, but also needs to be made beautiful by including local cultural elements. So that it can become a pride of the local community and increase the aesthetics of the city.

Several span bridges have been completed, namely the Merah Putih Bridge which has now become a new icon of Ambon City tourism, Maluku stands majestically stretching over Teluk Dalam Ambon Island. The construction cost of this Merah Putih Bridge is Rp. 772.9 billion.

Other bridge that become icons and significantly improve connectivity between regions are the Tayan Bridge 1,440 meter, with costs amounted to Rp 740 billion at Central Kalimantan.

#### 1.3.3.3. Dams

Indonesia launched a target for the construction of 65 dams during 2015-2019. Until the end of 2019, the government targeted the construction of 29 dams to be completed. For 2018 itself, nine new dams will be constructed with a total funding requirement for construction and supervision worth Rp 18.25 trillion.

Indonesia itself has a very large potential of water resources, reaching 3.9 trillion cubic meters / year with a potential for hydroelectric power of 75,000 MW.

However, currently just being used only around 691 billion cubic meters / year. This means that there are still 3.2 trillion m3 / year or around 80 percent that have not been used to support the agricultural sector, urban and industrial raw water, electricity generation and tourism.

# 1.3.3.4. Public Waste, Sanitary & Drinking Water Facility

For handling public waste, sanitary and drinking water infrastructure programs, the need for construction funds is Rp. 128 trillion. The idea is to achieve a policy of "100-0-100, namely 100 percent access to drinking water, 0 percent slums, and 100 percent sanitation" in 2019.

The main steps are directed to the construction of drinking water facility in urban areas for 15.4 million house connections (145,162 liters per seconds), construction of communal wastewater systems in 5,200 areas, and centralized scale in 200 areas and construction of local wastewater systems with sludge treatment plants in 222 districts / cities

# 1.3.3.5. People Housing

Whereas in the housing sector, the fund needs are Rp. 184,663 trillion. The main target is the development of tower for rental housing as many as 61,575 units, and the construction of special houses as much as 21,285 units.

# 1.3.4. Telecommunication

There is massive investment in the Indonesia telecommunications sector. Due to the Indonesian people are so hungry for bandwidth, and also challenging geographic conditions for telecommunication infrastructure as the island state.

### 1.3.4.1. Palapa Ring

Palapa Ring is a national fiber optic network development project, that will reach 34 provinces, 440 cities / regencies throughout Indonesia with a total length of sea cables reaching 36.000 kilometers, while cable in land is 22.000 kilometers.The government's plan, the Palapa Ring is a ring-shaped broadband fiber-optic network that encircles seven islands namely Sumatra, Java, Kalimantan, Nusa Tenggara, Sulawesi, Maluku and Papua.

The Palapa Ring project consists of three packages namely West, Central and East. The three Palapa Ring project packages did not use through State Budget, but received government support in the form of Project Development Fund (PDF).

#### West Package

For the West Package investment, the project will be run by the Moratel - Triasmitra Consortium.

The West package reaches Riau and Riau Islands (up to Natuna Island) with a total length of fiber optic cable of around 2,000 km. The West Palapa Ring Package has a project value of Rp1.28 trillion.

### **Central Package**

Meanwhile, the Central Package investment project was won by the Lima Pandawa consortium. Its members are PT LEN, PT Teknologi Riset Global Investama, PT Sufia Technologies, PT Bina Nusantara Perkasa, and PT Multi Kontrol Nusantara.

The Central Package reaches the regions of Kalimantan, Sulawesi and North Maluku (up to Sangihe-Talaud Islands) with a total length of fiber optic cables of around 2,700 km. The Center Package Palapa Ring value is Rp. 1.38 trillion. While the East Palapa Ring Paket investment is worth Rp. 5.1 Trillion.

### Eastern Package

The Eastern Package is run by PT Palapa Timur Telematika. Overall the eastern Palapa Ring package project has reached a 50% progress which starts covering the land route with a length of about 2,500 kilometers.

While for the sea area that reaches a distance of around 4,500 kilometers, is carried out after this land section. The construction of the East package Palapa Ring fiber optic network can reach 35 cities / regencies in East Nusa Tenggara, Maluku, West Papua, and inland Papua.

# 1.3.4.2. Cellular Project

Meanwhile for cellular business activities in Indonesia, it is run by several cellular operators supported by several tower companies. In addition, there are also several companies that focus on developing fiber optic networks especially to market Cable TV, data and entertainment services.

Telkom Tbk group as the largest cellular operator budgeted a capex of Rp 30 trillion in 2018. That will be used 50% for mobile, 30% for fixed broadband for IndiHome, and 20% for others.

Indosat Tbk as the second largest operator, prepares spending capex of around Rp 7 trillion. The third largest operator, XL Axiata, budgeted capital expenditure of Rp 7 trillion. About 70% will be used for data infrastructure development outside Java. While the rest is to improve the quality of information technology (IT) systems, the development of big data and customer analytics.

Another cellular operator, PT Smartfren Telecom Tbk (FREN), allocated a capital expenditure budget of Rp 2 trillion for this year. The funds are used to add 6 to 7 thousand new base transceiver stations (BTS).

#### 4G INVESTMENT

Cellular operator PT. Telkomsel as a subsidiary of state owned company Telkom Group, said it was ready to maximize the expansion of the 4G network accros Indonesia.

Because it has won the auction for additional frequency of 30 MHz from the 2.3 GHz spectrum.

For this reason, Telkomsel buid more than 500 Base Transceiver Station (BTS) towers using a 2.3 GHz spectrum.

Telkomsel target is the regions with the highest data service needs, thus enabling customers to enjoy maximum mobile broadband access speeds of up to 400 Mbps.

This service will support the digital ecosystem in Indonesia, including e-commerce, and encourage the development of small and medium businesses.

#### TOWER OPERATOR

In supporting the mobile operator (cellular), telecommunication tower business player also do the business expansion. Here are the tower operator which spend for building new telecommunication tower infrastructure for support mobile celullar :

- 1. PT. Solusi Tunas Pratama capex Rp 600 billion for building 6.856 tower units
- Inti Bangun Sejahtera capex Rp 2,1 triliun for building
   077 tower units
- Bali Towerindo Sentra capex Rp 860 billion for building
   1.297 tower units

- 4. Protelindo capex Rp 2,5 trilion for building 15.000 tower units
- 5. Tower Bersama Infrastruktur capex Rp 2,5 triliun for building 13.318 tower units

Their expansion covering not only build more new Base Receiver Transmission. But also developing the fibre optic cable network and even enter into internet and cable tv service.

# 1.3.4.3. Tv Cable Provider

While some data service providers and Cable TV are also actively investing in entertainment-hungry Indonesian markets and bandwidth access. PT First Media Tbk, budgeted capital expenditure of Rp. 350 billion so far this year. PT MNC Sky Vision Tbk allocates Rp. 400 billion for 2018. Another cable TV operator, PT Indoritel Makmur Internasional Tbk, continued its capital expenditure of Rp 2.3 trillion to support the development of its business line with the Fiber Star brand.

And cable TV operator PT Dian Swastatika Sentosa Tbk (DSSA) will expand its business development in the multimedia sector by allocating capital expenditure of US \$ 60 million.

# 1.3.4.4. Bakti Project (USO)

The Telecommunications and Informatics Accessibility Agency (BAKTI) offers a Government Cooperation Project opportunity with Government Multifunctional Satellite Business (Public Private Partnership) for projects included in the scheme that was formerly known as Universal Service Obligation (USO). With investment cooperation for providing Satellite High Throughput (HTS) technology, procurement of Government Multifunctional Satellites, will be able to provide a broadband connection of 150 Gbps which is expected to meet the needs of government service points throughout Indonesia, focusing on remote and outermost border areas.

BAKTI has identified 145,500 service needs from Government service points that require broadband connections such as in the education, health and regional government sectors. This project has a CAPEX of around Rp. 5.86 trillion. The investment return scheme comes from government installments through the service availability payment scheme (AvailabilityPayment / AP) for 15 years.

# 1.3.4.5. Satellite Project

Pasifik Satelit Nusantara (PSN) will launch a new PSN VI satellite, with a cost of US \$ 230 million will be launched by the end of 2018. The satellite is produced by Space System / Loral (SSL), launched from Cape Canaveral, Florida, United States with a rocket by SpaceX. PSN VI Satellite which has the capability of High Throughput Satellite (HTS) for internet service needs will be operated by a subsidiary of PSN, PT. PSN Enam Indonesia.

Meanwhile, other satellite owned by state owned company PT. Telkom, went first to space. This Satellite Merah Putih (means Red and White, as a color of national flag) was launched also from Cape Canaveral, Air Force Station, Florida, United States (US). Investment for Red and White Satellite is US \$ 166 million. Despite carrying a larger capacity, it turns out that the costs incurred by Telkom are not as big as the previous generation satellites, because the Red and White satellite utilize SpaceXmade rockets (Falcon 9). This rocket can be used repeatedly, so the costs incurred by users are not too large.

# 1.3.4.6. Backbone Project

State owned telecommunication company PT Telekomunikasi Indonesia Tbk has completed half the development of the Indonesia Global Gateway (IGG) project which stretches sea network cables along 5,800 Km. The sea network connects nine regions in Indonesia ranging from Dumai to Manado. This optical cable line is part of a global path that connects networks in the Middle East, Southeast Asia and Northern America. The starting point of IGG's submarine optical cable network in Dumai (Sumatera) is connected to a cable network that ends in Marseille in France. The IGG network in Indonesia ended in Manado, then connected to Los Angeles, United States.

This IGG project has made Indonesia the world's data traffic route as a hub for Europe, Asia and America. Targeted at the end of 2018 the IGG project will be completed.

Meanwhile, another Indonesian cellular operator, PT. XL Axiata Tbk has also completed a sea cable backbone project. They ensure that the Australia-Indonesia-Singapore Sea Cable Communication System project which starts in December 2017 will be completed and will operate on schedule end of 2018.

The Sea Cable Communication System (SKKL) stretches along 4,600 kilometers (km) and connects Australia and Singapore. PT. XL Axiata Tbk participated as an Indonesian representative in this project as well as a landing partner at Anyer (Banten) The project is being worked on by telecommunications company Vocus Group and provider of subsea network services and products Alcatel Submarine Networks (ASN) worth US \$ 170 million. The capacity to be obtained from the communication line is 6 times the capacity of Indonesia's international network now, which is 30 TB for the Indonesian route to Singapore and 20 TB for Indonesia to Perth, Australia. Another benefits from this project is the communication channel is expected to reduce dependence on Singapore which is the main route of Indonesian traffic to the current global network.

In addition, this international communication line through Australia is also considered safer than the route through the Philippines.

Previously, the Chairman of Vocus Group Vaughan Bowen revealed the value of the project was around US \$ 170 million. He explained that the existence of the network was very important especially to support the Information Technology (IT) infrastructure in Indonesia.

# 1.3.5. Tourism

Indonesia has so many beautiful places to visit, even recognized by most tourist as heaven on earth. The charming of its culture and also the hospitality of the peolle, already well known abroad.

Nowdays tourism is hugr business. Statistically show now tourism roles for 15 % of Indonesia GDP. Generate Rp. 275 Trillion turn arround in business. Also tourism sector hire 19 million worker. And in 2019 expexted will be 20 million overseas tourist visit and 275 million time domestic traveling tourist.

### 1.3.5.1. New Strategy

Since 2014, the government of Indonesia took a new strategy through its plan and action, focus accelerating of development for 10 new destinations.

These 10 new tourism spots actually not start from the zero, but putting it as prioritize program will make it faster to be worldwide destination.

These 10 new destinationas are :

- 1) Lake Toba, North Sumatera
- 2) Tanjung Kelayang, Belitung
- 3) Tanjung Lesung, Banten
- 4) Thousand Island, Jakarta
- 5) Borobudur Temple, Central Jawa
- 6) Bromo Tengger Semeru, East Jawa
- 7) Mandalika, West Nusa Tenggara
- 8) Labuan Bajo, East Nusa Tenggara
- 9) Wakatobi, South East Sulawesi
- 10) Morotai, North Maluku

### 1.3.5.2. Investment

The investment needed for develop these destination becoming world class, will be arround Rp. 300 Trillion. It will come from government expenditure for supporting the infrastructure, but mostly outside the infrastructure will come from the private sectors such build the hotels, resorts, amusement park, marine tourism, etc. And also will push the small medium entreprise grow arround thoses areas. Now four of these 10 new destination already granted the status as Special Economic Zone. By having this status will be easly accelerating the bireaucracy & regulation breakthough. These four destination namely Mandalika Lombok, Tanjung Kelayang Belitung, Tanjung Lesung Banten, and Morotai North Maluku.

Then the two which granted as Tourism Authority Body (before later on will be promoted as Special Economic Zone too) namely Lake Toba North Sunatera and Borobudur Temple Central Java.

The rest 4 new destination still not granted any specail treatment yet. But soon will be granted the status as Tourism Authority Body too. Many opportunities open for any investor.

### 1.3.6. Transportation

### 1.3.6.1. Airport

One of the transportation infrastructure that is being speeded up, is the airport. Given that Indonesia has a population of more than 260 million people with a geographical more than 13.000 islands. Then air transportation is an absolute necessity, and this means the need of development and expansion for more airports.

Indonesia is targeting the construction and development of new airports in 15 locations spread throughout Indonesia.

In addition to the construction of a new airport, the goverment will also extend the runway in 27 locations and rehabilitate airport passenger terminals in 13 locations.

The construction and development of the airport will focus on the outermost regions and the Indonesian border. Locations such as the Anambas Islands (Riau Islands Province) or Miangas Island (North Sulawesi Province) located on the Indonesia-Philippines border are priority points.

The 15 new airports to be built including : Anambas, Tambelan, Enggano, Miangas, Morowali, Buntu Kunik, Kufar, Namniwei, Pantar, Moa, Segun, Sinak Korowai and Manggelum.

All airports that are built and developed are operated by stateowned companies namely ANGKASA PURA I (AP I) and ANGKASA PURA II (AP II), and some are managed by government through the UPT Technical Management Unit (especially small airports or pioneers).

### EXPANSION OF AIRPORT SOEKARNO-HATTA

Construction of terminal 4 Soekarno-Hatta Airport (Soetta) is being prepared. This project will spend a budget of Rp 11 trillion. and planned to be built starting in 2020.

Construction of the terminal is due to the increasing number of passengers at the airport. Project still in the process of detail, engineering, and design. At the end of 2018 will complete the basic design. Then it will then detailed engineering design (DED) as a document for tender process.

In addition to the construction of Terminal 4, there will also a plan to add new airports that are still connected to Soekarno Hatta Airport.The location of this new airport is northern of Soekarno-Hatta Airport, or more precisely within 10 kilometers.The investment is estimated to reach Rp. 100 trillion.The construction of this new airport is estimated to be partly constructed in the sea (reclamation) and partially onshore. The construction target will start in two years later.

#### ANGKASA PURA I

For future working plans, both Angkasa Pura I and Angkasa Pura II have their own agendas. Until 2020, Angkasa Pura I (AP I) will focus on developing and building four airports namely:

- a. Kulon Progo Yogyakarta Airport,
- b. Syamsudin Noor Banjarmasin Airport,
- c. Juanda Airport Terminal 3 Surabaya
- d. Hasanuddin Makassar Airport

Of the 4 airports, the budget needed for the construction of Kulon Progo Airport in Yogyakarta is the biggest. Where the construction costs reach Rp. 6.7 Trillion.

Then at Bali along with the increase in tourist visits to Bali, it is clear that airport expansion is needed. During this time, it used the I Gusti Ngurah Rai Airport owned by Angkasa Pura I. To build the second runway of Airport I Gusti Ngurah Rai in Denpasar, the cost was almost Rp. 27 trillion. This can only add 10 million passengers. But it will cheaper but have far more capacity, if construct new additional airport in Bali, which project is North Bali Airport. By calculation, it only needs Rp. 6.3 trillion to build the North Bali Airport, even though the distance is quite far, so it needs to be connected toll road 7.5 kilometers from south to north. But the total cost will still be cheaper. Investors who have been seriously interested in joining this project are SinoHydro from China.

In addition to Bali, in Kediri (East Java) is also planned to be built a new airport by the private company Gudang Garam Tbk as the investor. The project value is estimated at Rp. 10 Trillion with an area of 400 hectares.

#### ANGKASA PURA II

While for Angkasa Pura II, it hopes that the financial closure of the four airports that have been planned can be carried out in 2019.

The four airports are:

- 1. Fatmawati Soekarno Airport in Bengkulu City,
- 2. Radin Inten II Airport in Lampung,
- 3. Hanandjoeddin Airport in Belitung,
- 4. Tjilik Riwut Airport in Palangkaraya.

Then there is also the Angkasa Pura II plan for the Kuala Namu airport development in North Sumatra. The development scheme offers two investment packages for the investors. Both investment packages consist of Package 1 worth Rp. 7 trillion and Package 2 around Rp. 4 trillion. Package 1 investment includes runway development, so that it can serve flights of Airbus 380-800 wide-body aircraft, also expand the cargo area to 25,000 m2, then the passenger terminal becomes 224,000 m2. So that it can double to accommodate 17 million passengers per year.

Then there are also some other Angkasa Pura II projects such as for the expansion of the runway at Supadio Pontianak Airport with a construction project worth Rp. 300 billion.

As well as continued realization of the construction of Jendral Besar Soedirman Airport in Purbalingga worth Rp. 300 billion.

### KOMODO AIRPORT

The Komodo Airport located in Nusa Tenggara Timur (NTT) is estimated to require development funds about Rp 3 trillion for its expansion project.

The government offers this project for investor with concession period. The scope of the project includes the construction, operation, and maintenance of facilities.

Investors will get an income from the services tariff implemented to airline etc. The concession period will be 25 years. The project covering from the extension of the 200 meter runway to 2,450 meters, coating runway lines, expansion of the arrival terminal, cargo terminal and other facilities.

# 1.3.6.2. Sea Port

Indonesia as an archipelagic state, until now has built more than 3,000 large and small ports to support its connectivity. Now, there will be 32 new ports projects. In the government's detailed plan, it will build 25 ports in 2018 and 7 ports in 2019.

### SOME STRATEGIC PORT PROJECTS

One of the port project to be worked on is in Sorong-Papua. The construction will be completed in 2021 and will cost up to Rp 2.1 trillion.

Then also Bitung Port, will be built as an international port. Develop its sea and land side will cost Rp. 365 billion project.

Next project is the Patimban Port Project in Subang, (West Java) which began in August 2018. The total cost is Rp. 43 trillion (multi phase) and for the first phase of the project is Rp. 9 trillion. The project will be built by the consortium of Penta Ocean-Toa-Rinkai-PT Wijaya Karya Tbk, and PT Pembangunan Perumahan.

The next is the Kijing port project in West Kalimantan which requires an investment up to Rp. 5.6 trillion. The first phase is estimated to be completed in 2019, while the completion of the second phase is in 2022. Kijing Port is designed with a pier depth of up to 14 meters to be able to be visited by large-sized ships. The port will also be able to accommodate 8.3 million tons of liquid bulk cargo and 15 million tons of dry bulk and handling container flow capacity of 2.7 million TEUs. This will be later on connected to an new built industrial area of 5,000 hectares.

Makassar New Port is another project. This port will replace the old port of Sorkarno Hatta in the city of Makassar. Later the old port will only function as a bulk port.

This project is worth Rp. 1.8 trillion and consists of stage A, B and C. Construction of stage A is completed in October 2018. It has a 1,000 meter pier and a container stacking field with a capacity of 1.5 million TEUus. The stages B and C is still ongoing and is expected to be completed in 2019. At the stage B, will reclaim the stacking field. Meanwhile the stage C includes the construction of a breakwater along 1,300 meters.

### LIST OF PORT PROJECTS

Following are new port development projects :

- a. Development of the Kuala Tanjung international port of North Sumatra Province
- b. Development of the international hub port of Bitung in North Sulawesi Province
- c. Maloy SEZ Port, East Kalimantan Province
- d. Inland Waterways / CBL Cikarang-Bekasi Java Sea DKI Jakarta Province, West Java Province
- e. Construction of West Java (North) Port of West Java Province
- f. Construction of the Sorong Port in West Papua Province
- g. Construction of the Kalibaru Port of DKI Jakarta Province
- h. Makassar New Port, South Sulawesi Province
- i. Development of Wayabula Port, Morotai Islands, North Maluku Province
- j. Development of the Palu port (Pantoloan, Palu Bay) Central Sulawesi Province
- k. Improvement capacity of the Parigi Port in Central Sulawesi Province
- I. Development of Kijing Port in West Kalimantan Province
- m. Development of Kupang Port, East Nusa Tenggara Province

### PELINDO

Pelabuhan Indonesia (PELINDO) group are the state owned companies deal in port business. Almost all big ports are owned by government through Pelindo.

There are 4 companies in Pelindo namely Pelindo I, II, III, and IV with its own operation teritorry.

#### PELINDO I

Operates at west side of Indonesia especially Sumatera area. One of the project owned by Pelindo I is the Belawan container terminal worth Rp. 6 trillion which will be built in two stages. In addition to the project, Pelindo I will also develop a multipurpose terminal in the Port of Kuala Tanjung, North Sumatra worth Rp. 4 Trillion.

Other projects will also be developed, namely developing the pioneer container terminal.

This pioneering project is for upgrading and modernization equipment for loading and unloading containers in Aceh, Sibolga and Tanjung Pinang. While Kuala Enok Port project was built to directly serve the export of palm oil and coal to India.

#### **PELINDO II**

Operates the ports in Sumatera and Java island. One of its bigest port is Tanjung Priok. Pelindo II plans to build three major projects. The total funds prepared reached Rp 9 trillion. Beyond that, there are still a number of other projects that will be carried out in the future.

First, Pelindo II will build Kijing Port in West Kalimantan. Second, will build a high rise building the Maritime Tower in the Tanjung Priok port area.

Third, Pelindo II will also build the Cikarang Bekasi Laut (CBL) Inland Waterways project. This is a project to utilize the potential of the river as one of the cargo transportation routes. So far, around 60-70 percent of cargo from Tanjung Priok Port has been distributed to Cikarang industrial area by trucks, which has caused road traffic congestion.

By building this inland waterway, will become the main transportation route for goods from Tanjung Priok Port to the industrial area in the Cikarang and surrounding areas. In addition to these strategic project, there are also several other projects revitalizing Pelindo II existing ports. So, the total investment next year will reach Rp. 11.5 trillion.

#### **PELINDO III**

To support the tourism business, Pelindo III sign three construction contracts worth more than Rp 1.2 trillion. This involves a contract awarded to the specialist maritime contractor Van Oord, and the rest two contracts awarded to the construction companies PT Wika Gedung and PT Pembangunan Perumahan (PP).

The projects are located in three ports, (Tanjung Perak in Surabaya, Benoa in Bali, and Gili Mas Lembar in Lombok). They will work on the construction of a cruise ship dock and container dock. This port project is to support the Mandalika Tourism Special Economic Zone (SEZ) in Lombok. This is part of the investment plan 2018-2019 worth Rp 12 trillion.

### **PELINDO IV**

Pelindo IV will build 16 ports, consisting of 5 ports in Papua, 5 ports in Sulawesi, 4 ports in Kalimantan and 2 ports in the Ambon and Ternate regions.

Five ports in Papua are Jayapura Port, Biak Port, Sorong Port and Manokwari Port.

Then five ports on Sulawesi Island are Kendari Port, Bitung Port, Makassar Port, Pare-Pare Port and Gorontalo Port.

Meanwhile, two ports in Maluku and Ternate are Ambon Port and Ternate Port.

Four ports on Kalimantan Island are Balikapapan Port, Tarakan Port, Nunukan Port and Sangatta Port.

The total budget for this 16 projects is Rp. 2,15 trillion. The investment made by Pelindo IV aims to increase the logistic capability especially for eastern Indonesia.

# 1.3.6.3. Train And Railway

Indonesia since 2014 has been very aggressive in building rail transportation infrastructure. Until 2018, the target for all the railroad in Indonesia is 3,258 km (including the existing). The railway investment target until 2030 will be reached Rp 605 trillion. The ratio of funding is through 30% Government investment and 70% Private Sector.

### PROJECT PROGRESS

Since the construction of 2014, there have been several projects completed and some ready for operation at the end of 2018.

Among them are the 85 kilometer (km) Prabumulih - Kertapati double line train project in South Sumatra. Furthermore, there are 8 railway projects that will be operational by the end of 2018, including :

- 1. The Makassar Crossing Parepare Phase I (Barru -Palanro) In South Sulawesi For 44 Km.
- 2. The Bandar Tinggi Kuala Tanjung Railroad In North Sumatra Along 21.5 Km,
- MRT Mass Rapid Train Stage I Lebak Bulus Bundaran HI 15.7 Km.
- LRT (Light Rapid Train) Jakarta Route Kelapa Gading -Velodrome 5.8 Km. The South Sumatra LRT Light Rapid Train Also Operates 23 Kilometers At End Of 2018
- Which Is Also Followed By The Operation Of The Adi Soemarmo Solo Airport Train 13.5 Km, And Many Others.
- For 2019, There Will Be 3 Railway intercity Projects That Will Be Ready To Operate, Including The 297 Km South Java Double Track Railway,
- 7. The Rantauprapat Crossing Railway Project Kota Pinang In 33 Km North Sumatra,
- 8. Jakarta LRT Light Rapid Train 43.3 Km.

# FUTURE PROJECT

There are 7 railway projects that are included in the National Strategic Projects, which are still in the preparation stage of planning documents namely:

- 1. Construction of the Jambi Pekanbaru railway line
- 2. Construction of the Jambi Palembang railway line
- 3. Construction of the Kertapati Simpang Tanjung Apiapi railway line
- 4. Construction of the Kulon Progo Airport railway line
- 5. Revitalization of Jakarta Surabaya crossing railway lines
- 6. Construction of the East Engineering West-Basic MRT stage (BED)
- 7. Jabodetabek Circular Line

While there are also 5 huge railroad projects, that use the government and business cooperation scheme (private partnership program), among others are :

- 1. Construction of the Puruk Cahu Bangkuang railway line
- 2. Construction of a railway line in East Kalimantan Province
- 3. Construction of the Muara Enim Baai Island crossing railway line
- 4. Construction of the Tanjung Enim Tanjung Api-api railway line
- 5. LRT Construction DKI Jakarta Kelapa Gading Velodrome.

# 1.3.7. Agro and farm

### 1.3.7.1. Palm oil

Indonesia is the largest palm oil producer in the world, with an area of 11.91 million hectares. Based on production data, it was 33.56 million tons of CPO in 2016 and is expected to increase to 39 million tons in 2021.

Indonesian palm oil production mainly comes from six provinces which contribute 74% to the total Indonesian palm oil production. The provinces are Riau (24%) and North Sumatra (17%). The next ranks were Central Kalimantan (11%), South Sumatra (9%), West Kalimantan (7%), and Jambi (6%). The use of palm oil for domestic non direct consumption reached 4.2 million tons in 2015.

Meanwhile, Indonesian palm oil's domestic non consumption allocated to processing industries such as margarine, cosmetics, biodiesel and others is projected to be 14 million tons in 2021. I Meanwhile, 23 million tons CPO for export.

### 1.3.7.2. Rubber

Indonesia's natural rubber production in 2018 is 3.21 million tons of dry rubber. Indonesia's volume of rubber exports in 2018 is estimated at 2.45 million tons.

With Indonesia's condition which is a surplus of rubber, shows that Indonesian rubber is indeed intended for export.

Based on data on rubber production in Indonesia, there are six provinces that have accumulative contributions reaching up to 75% of national production. These rubber producing provinces are South Sumatra (30%) North Sumatra (13%) Riau (10%) Jambi (9%) West Kalimantan (8%) and Central Kalimantan (5%).

### 1.3.7.2. Coffee

Smallholder plantation coffee production is in 6 central provinces with a total 67% national share. The highest coffee production in is South Sumatra (18.99%), the second position is Lampung (17%), while the other 4 provinces are in West Sumatra, Aceh, Bengkulu and North Sumatra.

While the rest other provinces combined contributed 33% to Indonesian coffee production. Indonesian coffee production, 95% is dominated by coffee cultivated in smallholder plantations where the majority is robusta coffee. Robusta coffee production in Indonesia is generally found in five provinces, namely South Sumatra, Lampung, Bengkulu, East Java and Central Java.

The Indonesian Arabica coffee production centers are in 4 provinces, namely North Sumatra , South Sulawesi, West Sumatra, and West Java.

In the World, Indonesia is the third largest coffee producer after Brazil, and Vietnam. As an exporter of coffee in the world, Indonesia is the fourth largest coffee exporter after Brazil, Vietnam and Colombia.The projection of coffee production shows that Indonesia's coffee production in 2021 will increase to 758 thousand tons compared to 2017 coffee production which only reached 637 thousand tons. Indonesia's coffee demand in 2021 is estimated to reach 369 thousand tons, so it is estimated that there will be a surplus of coffee supply of 425 thousand tons.

### 1.3.7.2. Sugar

Sugar cane plantations in Indonesia are mostly cultivated by the people as raw material for making sugar. Until 2015, sugar cane plantations for sugar in Indonesia can only be found in 9 provinces, namely North Sumatra, Gorontalo, Lampung, South Sumatra, West Java, DI Yogyakarta, Central Java, East Java and South Sulawesi. Among those 9 provinces, in 2012-2017, East Java is the largest sugarcane producer in Indonesia with the contribution of sugar cane from East Java reaching 48% of Indonesia's sugarcane production.

Indonesian sugarcane production (as measured in the form of crystalline sugar) in 2016 reached 2.2 million tons from 444.220 ha of sugarcane harvested area. The consumption of sugar in Indonesia in the same year based on the survey results reached 7.5 kg / capita. When viewed on the side of sugar cane trade between countries, Indonesia is known as a sugar importing country. Nevertheless, Indonesia is listed as the eleventh largest sugar producer with the seventh largest harvest area in the world. Sugar consumption in 2018 amounted to 5.088.201 tons and in 2021 is estimated to reach 5.260.479 tons so that a deficit of sugar supply in Indonesia is expected to be about 4 million tons.

#### PTPN X DOWNSTREAM UPSTREAM

State owned company PT Perkebunan Nusantara X (PTPN X) will use the state equity participation fund of Rp. 975 billion to strengthen its business. This is includes off farm (processing activity) and on farm (plantation activity). For off farm, PTPN X will spend Rp. 743 billion for EPCC's work to increase Sugar Processing Plant (Gempolkrep's) capacity from 6,500 Tons of Cane per Day (TCD) to 8,000 TCD.

The work includes the replacement of production process equipment, the construction of a sugar processing system with

a carbonaceous remelt defection scheme, the construction of new boilers, a new turbine generator, and the application of an automation system. For upgrading its bioethanol plant, will spend Rp. 123 billion to build facilities including Food Grade CO2 Recovery Plant, Redistilation of Fuel Grade Ethanol (FGE) facilities to Extra Neutral Alcohol (ENA) capacity of 100 KPLD.

### 1.3.7.1. Tea

Although tea cultivation in Indonesia is expanding from North Sumatra to East Java, tea plantations in Indonesia are in a declining condition.

The development for the area of tea plants in Indonesia has continued to decline since 2000, so that in 2016 only 117.27 thousand Ha was left with the majority (46%) cultivated by the People's Plantation while the rest was cultivated by Large State Plantations (30%) and Large Private Plantations (24%).

Indonesia is one of the 7th tea producing countries in the world. In addition, at the same time Indonesia is also as the world's 7 th tea exporter. Indonesian tea production is estimated to drop from 2017 to 2021 as well as consumption, which is expected to decline over the next five years. In 2017-2021, Indonesia is expected to experience a surplus of tea.

The decline of Indonesian tea agro-industry is now due to the problems that Indonesian tea has not yet overcome, such as the low productivity of the plant because of the dominant tea plants that have not used superior seeds, the limited mastery of product processing technology and the inability of farmers to follow the recommended technology.

# **1.3.8.** Manufacturing Plant

### 1.3.8.1. Petrochemical Plant

Lack of upstream production for chemicals, making Indonesia highly dependent on imports.

Chemical material needs for its domestic 5.6 million tons per year, almost half of which had to be imported.

So investment in the petrochemical sector, is urgently needed to meet this domestic market demand.

Until 2025, there are already 11 planned investments for petrochemical plant. In the near future there are 3 biggest petrochemical plants to be built immediately, namely:

- The methanol industry project becomes olefins in Bintuni Bay, West Papua with an investment of around US \$ 2.5 billion. Potential investors in this project are PT Pupuk Indonesia, Sojitz, Ferrostaal, and LG. This project is expected to be auctioned at the end of 2018, and will operate in 2022.
- 2. The naphtha cracker industrial project owned by PT Chandra Asri. The project consists of two segments, namely increasing capacity projects and construction of new crackers. Increasing capacity investment projects amounted to US \$ 5.442 billion, while the new cracker construction project is valued at US \$ 5 billion.
- Lotte Chemical's naphtha industrial project in Cilegon, Banten with an investment of US \$ 3.5 billion. This project is projected to be completed in 2023.

Furthermore, investment in a smaller scale is also rampant, namely a Thai company, Siam Cement Group (SCG), will build a US \$ 600 million naphta cracker production facility in Cilegon, Banten.

Then there are also the investment of pharmaceutical chemical companies PT Kimia Farma Sungwun Pharmacopia worth Rp. 132 billion and PT Ethica Pharmaceutical Industry amounted to Rp1 trillion. While in the cosmetics sector, PT Unilever Indonesia made a factory expansion worth Rp. 748 billion.

Indonesia targets investment in the Chemical, Textile and Multifarious Industries sector to reach Rp. 117 trillion in 2018. This accounts for almost one-third of the total national manufacturing group worth Rp. 352 trillion

# 1.3.8.2. Steel Plant

Based on data from the Indonesian Iron and Steel Association (IISIA), investment is currently grow in Indonesia's steel industry. The prospect of the metal industry subsector is very promising, because of the still low national steel consumption per capita. So that the growth is still very large. In 2018, domestic steel demand is predicted to increase 3.5% to 14.5 million tons, this is driven by so many infrastructure projects. While the capability of the national capacity steel industry is only 8 million tons per year

While viewed from a regional perspective, national per capita steel consumption is only 46 kilograms (kg).

Compare that with neighbour country Malaysia which has penetrated 400 kg per capita, Thailand is above 300 kg per capita, and even Vietnam is close to 200 kg per capita. IISIA predicts the domestic steel market will grow through 20 million tons by 2020.

### SEVEN STEEL PLANTS

Seven local and foreign steel companies immediately invested US \$ billions of funds to build a new steel plant.

The seven companies entered the upstream to downstream steel industry, are as follows:

- Shandong, the Chinese company intends to build a stainless steel / SS steel factory in Konawe, Southeast Sulawesi, with a capacity of 1 million tons per year. Investment value reaches US \$ 2 billion.
- Tsingshan Group, established a company called PT Tsingshan Steel Indonesia (TSI) to build nickel pig iron (NPI) and pig iron plants with a capacity of 507 thousand tons and 700 thousand tons in Morowali industrial area (KI), Central Sulawesi.

Investment value reaches US \$ 118 million.

- Dexin through PT Dexin Steel builds a carbon steel plant with a capacity of 3 million tons per year in Morowali. Investment will be US\$ 750 million.
- 4. Sunrise Surabaya builds a galvanizing coated sheet factory with a capacity of 140 thousand tons per year

- Gunung Garuda Bekasi built a blast furnace (BF) iron plant with a capacity of 1 million tons and cold rolling mill (CRM) 200 thousand tons per year.
- Delco Prima builds a concrete reinforcement steel factory (rebar) with a capacity of 300 thousand tons per year
- 7. Tjakrindo, established a CRM factory with a capacity of 250 thousand tons per year.

### OTHER STEEL PLANTS

Tata Steel, one of the world's largest steel producers from India, expressed its desire to invest in building a steel wire steel mill in Indonesia.The investment value is estimated to reach SGD 60 million or equivalent to Rp 633 billion.

Currently the Tata Steel is conducting a survey in several locations of industrial areas on the island of Java, including in Banten and East Java.

Then there is also the Chinese company Hebei Bishi Steel Group which wants to build a steel plant in Kendal Regency, Central Java. This investment value of US \$ 2.5 billion is the largest in Asia. Its seriousness is shown by cooperating with its partner in Indonesia, PT Seafer Industrial Estate, which has provided 700 hectares of land in Patebon Subdistrict.

For the first phase, they will build a 3 million tons steel plant, a coking coal plant with a capacity of 2.4 million tons, a 270 MW power plant and a dock support facility with a capacity of 100 DWT will be built. The plant is the biggest plan in Asia and it can absorb up to 10,000 workers.

### MOROWALI IS THE NEW STEEL INDUSTRIAL AREA

Indonesia is now one of the world's major stainless steel producers, besides China. Before we only knew about the Krakatau Steel industrial area in Cilegon (Banten) as the center of Indonesian steel producers, now there is a new production center in Morowali (Sulawesi) where it is close to the location of its nickel mine. In Morowali District, 4 stainless steel plants have been integrated with raw materials, namely Nickel Pig Iron. The total capacity of the four plants will reach 5.7 million tons of coarse stainless steel (slab) and finished products in the form of hot rolled (HR) stainless and cold rolled (CR) stainless.

The majority of the project was driven by the Chinese steel king Tsingshan Group who acted as the main investor in the Morowali Industrial Area.

In fact, this Morowali Industrial Estate was developed and built by Tsngshan. Based on government data, Tsingshan also collaborated with Bintang Delapan Group to form PT Sulawesi Mining Investment (SMI), which has a 300,000 tons per year Nickel Pig Iron and 1 million tons of stainless steel slab per year. The investment value reaches US \$ 635 million and US \$ 180 million, respectively. Tsingshan didn't stop there.

They then hooked Ruipu Technology Group and IMIP to establish PT Indonesia Tsingshan Stainless Steel.

The company has a Nickel Pig iron plant of 600 thousand tons per year and a stainless steel slab of 1 million tons per year, which has a total investment of US \$ 818 million.

Furthermore, Tsingshan together with PT Bintang Delapan Mineral formed PT Tsingshan Steel Indonesia (TSI) which built a carbon steel plant with a capacity of 1 million tons and Nickel Pig Iron 500 thousand tons per year.

Still with Ruipu again, Tsingshan formed PT Indonesia Ruipu Nickel and Chrome, which has a ferochrome plant with a capacity of 600 thousand tons per year and staineless steel cold rods of 700 thousand tons. The investment value is US \$ 461 million.

Other projects were worked on by PT Guang Ching Nickel & Stainless Steel. The company has 600,000 tons of Nickel Pig Iron factory per year, 1 million tons of stainless steel slab, and 2 million tons of hot steel rods per year.

# 1.3.8.3. Otomotive Plant

In terms of car sales of 1.1 million units, and installed production capacity of 2.2 million units, Indonesia is the largest in ASEAN. Even reaching a one to third of the total ASEAN market.

Currently, there are 36 companies engaged in the production of cars, which consists of distributors and manufacturers. Also there are 1,500 companies producing various components. The value of investment in the automotive sector is also large, for example in 2017 it reached Rp 16.5 trillion.

#### INVESTMENT

- 1. PT Mitsubishi Motors Krama Yudha Indonesia (MMKI) inaugurated a new plant. The factory that will be used to produce the Pajero Sport, Xpander and Colt L300 is located in the Greenland International Center Cikarang Area (Bekasi Regency-West Java). This new plant with an area of 30 hectares and a production capacity of 160 thousand units each year is worth an investment of Rp 7.5 trillion and is able to absorb 3,000 workers.
- 2. Wuling Motors from China built a production plant also in the area of Greenland International Industrial Center Cikarang (Bekasi-West Java regency). This is to produce Confero and Cortez types. The factory investment value with a production capacity of 120 thousand units per year reaches US \$ 700 million. The Wuling Motors factory covers 60 hectares, consisting of 30 hectares built for manufacturing facilities and another 30 hectares for supplier park.
- Another China car manufacturer PT Sokonindo Automobile (Sokonindo) inaugurated a new plant in the Cikande Modern Industrial Area (Serang-Banten district). This sophisticated 20-hectare robotic factory is used to produce 50,000 types of Glory 580 SUVs per year.
- 4. While Korean manufacturer Hyundai Mobil Indonesia also does not want to be left out, it considers Indonesia to be a large market because of the penetration of new car ownership just 7.9 percent of the total 261 million Indonesian population. Data

shows that 87 out of 1000 Indonesians already have a car. This is relatively low considering that Malaysia alone is above 440 units per 1000 people, Thailand has 220 units per 1000 people. So Hyundai will soon invest heavily to build a factory with a capacity of 200,000 units per year

# 1.3.8.4. Fertilizer Plant

Indonesia's fertilizer needs are provided by the state company namely Pupuk Indonesia Group.

It has several subsidiaries to produce the fertilizer such as :

- 1. Iskandar Muda plant (Lhokseumawe Aceh)
- 2. Pusri (Palenbang South Sumatra),
- 3. Pupuk Kujang (Cikampek-West Java)
- 4. Petrokimia Gresik (East Java)
- 5. Pupuk Kaltim (Bontang East Kalimantan).

In 2018 the Pusri 2B fertilizer plant starts to operate in Palembang. This new plant was built by a consortium contractor of PT Rekayasa Industri and Tokyo (Japan) with a total investment of Rp. 8.5 trillion. In addition to Pusri 2B, it also soon operates the Kaltim-5 Plant (Bontang – East Kalimantan) and Amurea 2 Plant in Petrokimia Gresik (East Java).

In addition to urea fertilizer type, NPK fertilizer plant will also be built soon. The NPK plant project will be built by Pupuk Indonesia Group between 2018 and 2025 with a total production capacity of 2.4 million tons.

The NPK plant will be built and operated at several areas such Iskandar Muda, Pusri, Kujang; and Pupuk Kaltim with detail :

- 1. One new unit of NPK plant will be built in the area of Pupuk Iskandar Muda Aceh (capacity 1 million tons per year).
- 2. Two new NPK plant units at Pupuk Kaltim East Kalimantan (capacity 500 thousand tons per year).
- 3. A unique NPK plant in the Pupuk Kujang area West Java will be built a new NPK plant (capacity 200 thousand tons per year)
- 4. One new NPK plant in the Pupuk Sriwijaya area -South Sumatera (capacity of 200 thousand tons per year)

In addition to urea and NPK fertilizers, a magnesium fertilizer plant will be also built by the consortium between Private Company Polowijo Gosari with the state-owned company PPA, which plant located at Gresik East Java.

This magnesium plant will be built with an investment value of Rp. 1 trillion (capacity of 1 million tons per year).

Polowijo Gosari has a magnesium mining area as a raw material in the Gresik region.

# 2. Searching the projects

# 2.1. Introduction www.tender-indonesia.com

### 2.1.1. About Tender Indonesia

www.tender-indonesia.com since 2000 serving the needs of the company for INFO PROJECT and NETWORKING business (in Oil and Gas, Mining, Electricity, Infrastructure, Telecommunications, Property, and Industrial).

The project owner is:

- Various Ministries
- State Owned Companies
- Regional Owned Companies
- Other State Institutions
- Multinational Private Company
- International Agency operating in Indonesia.

Companies that subscribe to our service (annual membership) are from Local, National, Foreign and Multinational Companies. Their business field are Suppliers, Agents, Stockists, Contractors, Consultants, Manufacturers, Equipment Rental, and Other Miscellaneous Providers. Our motto is "Ensuring owner member to get business / project opportunity".nsuring you get business / project opportunity".

### 2.1.2. Services

The service types we provide are both free to the public and special for membership only (paid). Service consists of INFORMATION SERVICES and NON INFORMATION SERVICES.

### 2.1.3. Overview of Information Service

Currently for INFORMATION SERVICES which we provide for members (annual paid membership) are up to 1,000 project tender info per day, as well as hundreds of upcoming project list and hundreds of winning tender information. The project information includes oil and gas, mining, electricity, infrastructure, telecommunications, industrial and property sectors. Regarding the technicalities for the search for the project as you see fit we will describe in the section "Chapter 5.0 How to Use Our Services" in this manual.

### 2.1.4. Overview of Non-Information Services

In addition to information services, we also provide non-information services such as:

- Video Profile Creation \_
- Multimedia Service \_
- **Digital Promotion** -
  - E-Commerce
- Business Event Organizer -
- **Tender Licensing** -

All of these services provided with our extensive knowledge and experience, knowledge and networking in various business sectors.

-**Training & Course** -

# 2.2. Services That We Provide

### 2.2.1. Type of Service

As pointed out in the introduction section that the service we provide consists of two types, namely INFORMATION SERVICES and NON INFORMATION SERVICES.

### INFORMATION SERVICES

- 1. Tender Information
- 2. Tender Award
- 3. Project Updates
- 4. Tender Statistic
- 5. Tender Android Apps
- 6. Tender Publishing
- 7. Tender TV

### EXPLANATION OF INFORMATION SERVICES

### 1) Tender Information

Provide a service of thousands of project tender information.

- 2) Tender Award Provides a list of winners of the project tender.
- 3) Project Updates

Provide information and data on future projects.

- 4) Tender Statistic
  - Provide various statistical data of all tender activities in Indonesia.

### 5) Tender Android Apps

Showing of project information, tender awards, and enter projects via Tender Indonesia application on Playstore.

### 6) Tender Publishing

Publish various "Special Report" either edition of printing or digital format which can be downloaded by both member and non member (public). The type of information is certainly different for members and non member (public).

### 7) Tender TV

Production visual audio that are broadcast on social media such as Facebook and Youtube.

#### NON INFORMATION SERVICES

- 5. Tender Consulting
- 6. Tender Event Organizer
- 7. Tender Production House
- 8. Tender Multimedia
- 9. Tender Training Course
- 10. Tender Licensing
- 11. Tender Partnership

### EXPLANATION OF NON INFORMATION SERVICES

1. Tender Consulting

Provide customized services to support you gain access to market. (specific clients.)

2. Tender Event Organizer

Organize a business event either independent or in cooperation with other parties.

- 3. **Tender Production House** Create a variety of TV shows on a network of 50 regional TVs.
- 4. Tender Multimedia

It is a website creation service, mobile application, and video (company profile etc.)

5. Tender Training Course

Provide training services / workshops either independent or sell other party training services.

6. Tender Licensing

Provide administrative and legal consultation and management services in order to qualify the tender needs.

### 7. Tender Partnership

That in all lines of our business division, open to cooperate with all parties in mutual agreement.

# 2.3. Membership and Benefit

Valuable Information Services is only available when you become our member. There are 3 types of membership namely Premium, Gold, and Platinum with each advantage.

### 2.3.1. Membership Premium

### ANNUAL FEE

Membership PREMIUM: Rp 2.970.000, - per year (include 10% tax) or USD 250 for foreign company.

### BENEFIT

- 1. You will get a username and password for access to a memberonly area www.tender-indonesia.com.
- 2. Inside this special member area you can see the various details of Tender Information, Tender Award, Project Update.
- 3. The technical details of the navigation are described in the Chapter in this Member Manual Guide (Chapter 5: How to Use Our Services).
- 4. You can also download various other valuable data including various project presentation files.

# 2.3.2. Membership Gold

### ANNUAL FEE

GOLD Membership: Rp 4.510.000, - per year (include 10% tax) or USD 450 for foreign companies.

### BENEFIT

- 1. All the benefits of Membership Premium (see point 3.1.2 above).
- 2. You will also get a "Tool Marketing Facility" to promote the product or service to the project owner. Even more than that, you can also promote products or services to thousands of other members who need your product / service.

# 2.3.3. Membership Platinum

### ANNUAL FEE

Membership PLATINUM: Rp 11.440.000, - per year or USD 1,250 for foreign company.

### BENEFIT

- 1. All the benefits of Membership Gold (See point 3.2.2 above).
- 2. You can place banner ads (linked to your website) to place on the main thing <u>www.tender-indonesia.com</u>.
- 3. You will be helped by our staff who actively informed you about various Tender Information. The data submitted is in accordance with the criteria of the field you choose.
- 4. For example from the side of a certain value, or type of project, etc. So here, you will be given information via email every day by our experienced staff.

### 2.3.4. Upgrading Membership

### ADDED COST

You can request upgrading of membership types when in a subscription. The calculation of additional fees will apply a proportional deduction to the remaining period of your subscription.

#### UPGRADING PROCEDURES

For upgrading implementation, please contact: (021) 6230 2979 Contact Person: Linagie

# 2.4. How To Register Membership & The Payment

### 2.4.1. Register Online

- 1. Please open www.tender-indonesia.com
- 2. Select the menu "Member Registration", there is to the right of the login menu.

| Member Access | VISA Credit Card<br>Accepted     |
|---------------|----------------------------------|
| User Name:    | Register For Full Access         |
|               | Menyediakan ribuan :             |
| Password:     | Info Tender                      |
|               | Daftar Pemenang Tender           |
| Verification: | Daftar Proyek Ke depan           |
|               | Yang mencakup Oil & Gas, Mining, |
|               | Electricity, Telecommunication,  |
| 2232794       | Infrastructure, & Industrial.    |
|               | MEMBER REGISTRATION              |

3. Here is a glance display the form that must be filled when registering to be a member in <u>www.tender-indonesia.com</u>

Silakan isi FORM berikut ini untuk menjadi member kami

| Nama Perusahaan     | : |
|---------------------|---|
| Kontak Nama         | : |
| Jabatan             | : |
| Produk/jasa         | : |
| Alamat              | : |
| Telp No             | : |
| Fax No              | : |
| E-mail              | : |
| Website (jika ada)  | : |
|                     |   |
| Verification Code : |   |
|                     |   |
| 943880              |   |
|                     |   |

Here are the data that must be filled in the registration form above:

- 1. Company Name
- 2. Contact Name
- 3. Position
- 4. Product / Services
- 5. Address
- 6. Phone Number
- 7. Fax Number
- 8. E-mail
- 9. Website (if any)
- 10. Verification Code (the contents of the corresponding
- 11. numbers that appear on the web)
- 12. Select the membership type
- 13. Then click send to submit the registration form.

After receiving your registration form, our marketing team will confirm it soon.

### **2.4.2.** Marketing Support Desk

We provide full support for registration. You can call our hotline at:

Telp (021) 6230 2979 / 624 7372

WA 081288699827 (Linagie)

Email info@tender-indonesia.com / member@tender-indonesia.com

### 2.4.3. The Payment

Payment can be done in various ways.

### Bank Transfer

Payment can be made by transfer to: BCA (BANK CENTRAL ASIA) Branch : Karang Anyar Jakarta Acc. Name : PT. TENDER INDONESIA COMMERCIAL Acc. No. : 370 3020 239 After that, please send slip of payment to our email info@tender-indonesia.com / member@tender-indonesia.com

### **Credit Card**

We also accept payment by Credit Card for Jakarta area through our EDC Portable.

### Electronic Payment / Payment Gateway

For electronic payment, will be available in the near future.

# 2.5. How To Use Our Services

There are several Services we provide. Information Services (Member Only) :

- 1. Tender Information
- 2. Project Updates
- 3. Tender Award

### Non Information Services (Non Member - Paid) :

- 1. Tender Consulting
- 2. Tender Licensing



### 2.5.1. Information Service Tender Information NAVIGATION METHODS SERVICE TENDER INFORMATION

Given Tender Information data is so many every day, so to make it easier for you to find a tender that suits your business, we divide it based on several sorting methods such as

- 1. Sort by Category
- 2. Sort by Date
- 3. Sort by Company / Agency / Institute Project Owner
- 4. Sort by Location

# Sort Tender Information grouped into 34 categories of occupations as follows:

- 1. Agro, Farm & Fishery
- 2. Transportation, Air Navigation & Equipment, Airport Facility
- 3. Books & Printing
- 4. Catering & Accomodation Service
- 5. Chemical, Coating Paint & Lubricant
- 6. Civil Construction
- 7. Computer, IT, Telecommunication & Multi Media
- 8. Consultant
- 9. Electricity, Power Generation, transmission, distribution & lighting
- 10. Engineering, Procurement, Construction & Fabrication Services
- 11. Forwarding & Logistics Services
- 12. Fuel & Coal
- 13. Heavy Equipment & Services
- 14. Equipment Services, Potable Water & Waste Management
- 15. Insurance & Financial Services
- 16. Laboratory Calibration Services & Equipment
- 17. Land Transportation & Services, Traffic Light & Signs
- 18. Man Power Supply
- 19. Marine Transportation & Equipment, Docking, Port Equipment
- 20. Equipment & Spare Parts
- 21. Mechanical Services & Underwater Work
- 22. Medical Equipment
- 23. MICE, Advertising & Travel
- 24. Support Equipment
- 25. Permit & Legal Service
- 26. Pipe, Casing, Valve, Tools & Hardware
- 27. Police & Military Equipment
- 28. Pump Compressor
- 29. Railway & Train
- 30. Seismic, Drilling & Well Service
- 31. Sensor, Metering & Instrumentation Control
- 32. Survey Inspection Services & Equipment
- 33. Uniform
- 34. Others

#### Here is a sorting page view by category on our website

#### www.tender-indonesia.com

#### Tender Info by Category

- Agro, Farm & Fishery
- Air Transportation, Air Navigation & Equipment, Airport Facility
- Books & Printing
- Catering & Accommodation Service - Chemical, Coating Paint & Lubricant
- Civil Construction
- Computer, IT, Telecommunication &
- Multi Media
- Consultant
- Electricity, Power Generation, Transmission, Distribution & Lighting
- Engineering, Procurement, Construction & Fabrication Services
- Forwarding & Logistics Services
- Fuel & Coal
- Heavy Equipment & Services
- HSE Equipment Services, Potable Water & Waste Management
- Insurance & Financial Services
- Laboratory Calibration Services & Equipment
- Land Transportation & Services, Traffic Light & Signs
- Man Power Supply
- Marine Transportation & Equipment, Docking, Port Equipment
- Mechanical Equipment & Spare Parts
- Mechanical Services & Underwater Work
- Medical Equipment
- MICE, Advertising & Travel
- Office Support Equipment
- Others

- Permit & Legal Service
- Pipe, Casing, Valve, Tools &
- Police & Military Equipment

o (2018-07-05) Pekerjaan Pemebersihan , Pembabatan Di Area Perkantoran Perumahan Puraka –I,II, III A B & IV , Pipe Yard Gudang Handak Pulau Sembilan Dan Sarana Olahraga Serta Penebangan / Pemaprasan Di Lingkungan Perkantoran Dan Perumahan PT Pertamina EP Field Panokala

#### PERTAMINA EP ASSET 3 o (2018-07-05) Pekerjaan Perawatan Dan Perbaikan Fasilitas Produksi Dalam

- Pekerjaan Turn Around C02 Removal Plant Cilamaya Utara Di Pt Pertamina Ep Asset 3 Subang Field PERTAMINA EP ASSET 2
- o (2018-07-05) Pengadaan Panel Motor Starter SP-VII Limau Timur PT. Pertamina EP Asset 2 Limau Field
- MEDCO E&P TARAKAN
- o (2018-07-05) Jasa Analisa Komposisi Gas Lapangan Tarakan
- PERTAMINA HULU ENERGI NUNUKAN COMPANY o (2018-07-05) Pengadaan 3d Seismic Depth Processing Obn Dan Streamer
- INDO CBM SUMBAGSEL II PTE.LTD
  - o (2018-07-05) Provision of Injection Fall-Off (IFO) Testing Services for South Sumatra Operation Area
  - PERTAMINA (PERSERO) DOMESTIC GAS

    - o (2018-07-05) Kompor Gas 1 (satu) Tungku ( Spesifikasi SNI 7368:2011) o (2018-07-05) Selang karet Kompor Gas LPG ( Spesifikasi SNI 7213:2014) o (2018-07-05) Regulator Tekanan Rendah ( Spesifikasi SNI 7369:2012)

#### ELECTRICTY

#### DALAM PROSES ENTRI DATA

#### CENTRAL GOVERMENT

- Kementrian Pekerjaan Umum o (2018-07-05) Pengadaan Kendaraan Operasional Es.1 (2018-07-05) Paket Pembangunan Rumah Khusus untuk Petugas Imigrasi di 0
- Kab, Belu (SKPP18-22) o (2018-07-05) Rehabilitasi Bendungan Greneng Kab. Blora; Kab. Blora; Jawa Tengah; 0 Bendungan; 0 Juta M3; F; K; Sy
- o (2018-07-05) Optimalisasi Jaringan Perpipaan Untuk Mendukung Kawasan RSUD Karel Sadsuitubun, Kab. Maluku Tenggara
- o (2018-07-05) Pembangunan Perpipaan Air Limbah Kota Pekanbaru Area Selatan

| HOME TENDER  | AWARD PROJ. UPDATES PROJ. UPDATES(ENG) DIRECT  | ORY STATISTIC LOGOUT                        |
|--|--|---|
| SORT TENDER INFO                                     | TENDER INFORMATION   | SURAT PEMBACA                               |
| Fender Info by Date                                  |  |   |
| Tender date (05/07/2018)<br>Tender date (04/07/2018) | OIL & GAS  |   |
| Tender date (03/07/2018)                             | GENTING OIL KASURI PTE. LTD.   |   |
| Tender date (02/07/2018)<br>Tender date (30/06/2018) | o (2018-07-05) Clinic and Medical Services (Re-Tender)   |   |
| Tender date (29/06/2018)                             | HUSKY - CNOOC MADURA LIMITED   |   |
| Tender date (28/06/2018)                             | o (2018-07-05) Molten Sulphur Handling Service   |   |
| Tender date (26/06/2018)                             | <ul> <li>o (2018-07-05) IBM Domino, Notes, Domino to SAP Connector and Sametime<br/>License Maintenance</li> </ul> |   |
| Tender date (25/06/2018)                             |  |   |
| Tender date (23/06/2018)                             | MEDCO E&P INDONESIA  |   |
| Tender date (22/06/2018)                             | o (2018-07-05) Pengadaan Battery<br>o (2018-07-05) Jasa Sewa Koneksi Internet Bgp1 Dan Browsing                    | Smart Marcom Ad                             |
| Tender date (21/06/2018)                             | o (2018-07-05) Jasa Sewa Koleksi Internet appi Dan Browsing  | onartmarcon Au                              |
| Tender date (20/06/2018)<br>Tender date (19/06/2018) | MEDCO E&P LEMATANG   | A finite we dealed users from a             |
| Tender date (11/06/2018)                             | o (2018-07-05) Pengadaan Single Gas Detector   |   |
| Tender date (09/06/2018)                             | PERTAMINA (PERSERO) PUSAT  | PT. Penjamin Infrastruktur Indonesia (Perse |
| Tender date (08/06/2018)                             | o (2018-07-05) Penyediaan, Pendistribusian & Pemasangan Paket Perdana Lpg  | Meningkatnya kebutuhan pembangunan          |
| Tender date (07/06/2018)                             | Untuk Kapal Perikanan Bagi Nelayan Kecil Tahun Anggaran 2018 – Wilayah Ii  | infrastruktur nasional untuk mendukung      |
| Tender date (06/06/2018)                             | PERTAMINA EP   |   |
| Tender date (05/06/2018)                             | o (2018-07-05) Jasa Sewa Test Unit Di Field Jatibarang   | -   |

72 www.tender-indonesia.com



Your Reliable Partner in Piping, PT. Mitra Galperti is a trading and s of completed range of Piping ...

#### PT. TRI MULVA GEMILANG

PT TRI MULYA GEN

#### PT. Tri Mulya Gemilang, PT. Tri Mulya Gemilang is an Indone pioneer in a development ... iv/s



MOORING BUOY, KEMAN Mooring Buoy is constructed fro diameter ranging fro ... ild steel with



-, - ...

PT Penjamin Infrastruktur Indonesia (Persero)

#### PT Penjamin Infrastruktur Indonesia (Persero), Secara ringkas, tujuan pembentukan PII adalah untuk: Meningkatkan ke ...

- o (2018-07-05) Rehabilitasi Bendungan Tempuran Kab. Blora; Kab. Blora; Jawa Tengah; 0 Bendungan; 0 Juta M3; F; K; Sy

### Sort Tender Information grouped by Company / Agency / InstitutionProject Owner

| TENDER INFORMATION   | TENDER INFORMATION  |  |  |
|--|---|--|--|
| Sorted by Project Owner  | Sorted by Project Owner   |  |  |
|  | CENTRAL GOVERNMENT  |  |  |
| OIL & GAS  | 1 Kanadatan Debatan University                                  |  |  |
| 1. BP BERAU LTD  | 1. Kementrian Pekerjaan Umum                                    |  |  |
| 2. CHEVRON INDONESIA COMPANY                                       | 2. UNIVERSITAS MATARAM  |  |  |
| 3. CHEVRON PACIFIC INDONESIA                                       | 3. Badan Informasi Geospasial                                   |  |  |
| 4. CNOOC SES B.V.  | 4. Badan Intelijen Negara                                       |  |  |
| 5. EMP BENTU LIMITED   | 5. Badan Koordinasi Penanaman Modal                             |  |  |
| 6. EMP GELAM   | 6. Badan Meteorologi, Klimatologi, dan Geofisika                |  |  |
| 7. EMP MALACCA STRAIT  | 7. Badan Narkotika Nasional                                     |  |  |
| 8. EMP SEMBERAH  | 8. Badan Nasional Penanggulangan Bencana                        |  |  |
| 9. EXXONMOBIL OIL INDONESIA INC.                                   | 9. Badan Nasional Penanggulangan Terrorisme                     |  |  |
| 10. GENTING OIL KASURI PTE. LTD.                                   | 10. Badan Pengawas Obat dan Makanan                             |  |  |
| 11. HUSKY - CNOOC MADURA LIMITED                                   | 11. Badan Pertanahan Nasional                                   |  |  |
| 12. IEV PABUARAN KSO   | 12. Badan Pusat Statistik                                       |  |  |
| 13. INPEX MASELA, LTD. (INPEX)                                     | 13. Badan SAR Nasional  |  |  |
| 14. JOB PERTAMINA - GOLDEN SPIKE INDONESIA LTD.                    | 14. BKKBN   |  |  |
| 15. JOB PERTAMINA - MEDCO E&P TOMORI SULAWESI                      | 15. BNP2TKI   |  |  |
| 16. JOB PERTAMINA - PETROCHINA EAST JAVA                           | 16. BP Batam  |  |  |
| 17. KANGEAN ENERGY INDONESIA LTD                                   | 17. BPPT  |  |  |
| 18. KSO PERTAMINA - RAMBA ENERGY WEST JAMBI LTD                    | 18. Dewan Perwakilan Daerah                                     |  |  |
| 19. MEDCO E&P INDONESIA  |   |  |  |
| 20. MEDCO E&P LEMATANG   | 19. DPD RI  |  |  |
| 21. MOBIL CEPU LTD.  | 20. DPR RI  |  |  |
| 22. PC MURIAH LTD.   | 21. Institut Teknologi Bandung                                  |  |  |
| 23. PEARLOIL (SEBUKU) LTD.   | 22. ΠS  |  |  |
| 24. PETROCHINA INTERNATIONAL (BERMUDA) LTD.                        | 23. Kementerian Agama   |  |  |
| 25. PETROCHINA INTERNATIONAL JABUNG LTD.                           | 24. Kementerian Dalam Negeri                                    |  |  |
| 26. PREMIER OIL NATUNA SEA B.V.                                    | 25. Kementerian ESDM  |  |  |
| 27. PERTAMINA (PERSERO) MARKETING & TRADING DIRECTORATE - SHIPPING | 26. Kementerian Hukum dan HAM                                   |  |  |
| 28. PERTAMINA (PERSERO) PUSAT                                      | 27. Kementerian Kehutanan                                       |  |  |
| 29. PERTAMINA (PERSERO) REFINERY UNIT VI BALONGAN                  | 28. Kementerian Kelautan dan Perikanan                          |  |  |
| 30. PERTAMINA EP   | 29. Kementerian Kesehatan                                       |  |  |
| 31. PERTAMINA HULU ENERGI ONWJ LTD.                                | 30. Kementerian Keuangan  |  |  |
| 32. PERTAMINA HULU ENERGI WEST MADURA OFFSHORE                     | 31. Kementerian Komunikasi & Informatika                        |  |  |
| 33. PERUSAHAAN GAS NEGARA (PERSERO), TBK                           | 32. Kementerian Koordinator Bidang Politik, Hukum, dan Keamanan |  |  |
| 34. SANTOS (SAMPANG) PTY. LTD                                      | 33. Kementerian Koperasi dan UKM                                |  |  |
| 35. SELE RAYA MERANGIN DUA   | 34. Kementerian Luar Negeri                                     |  |  |
| 36. SKK MIGAS  | 35. Kementerian Negara Riset dan Teknologi                      |  |  |
| 37. STAR ENERGY (KAKAP) LTD.                                       | 36. Kementerian Pariwisata dan Ekonomi Kreatif                  |  |  |
| 38. TAC PERTAMINA - ELLIPSE ENERGY JATIRARANGON WAHANA LTD.        | 37. Kementerian Pembangunan Daerah Tertinggal                   |  |  |
| 39. TOTAL F&P INDONESIE  | 57. Kementenan Perilbangunan Daeran Terunggai                   |  |  |

#### Sort Tender Information grouped by Tender Province Location in progress

| SORT TENDER   | TENDER INFORMATION  | MEMBERS ADVETORIAL  |  |  |  |  |
|---|---|---|--|--|--|--|
| Tender by Date  | Sorted by Project Location  | PT. MITRA GALPERTI  |  |  |  |  |
| Tender date (05/07/2018)     Tender date (04/07/2018)     Tender date (03/07/2018)     Tender date (03/07/2018)     Tender date (02/07/2018)     Tender date (29/06/2018)     Tender date (29/06/2018)     Tender date (29/06/2018) | Tender by Location akan menampilkan aneka aktivitas tender di suatu lokasi. Dalam<br>hal ini akan disajikan kegiatan tender tiap propinsi.<br>Tender yang disajikan adalah kegiatan proyek baik milik pemerintah pusat, lembaga<br>negara, pemerintah propinsi, pemerintah kota dan pemerintah kabupaten, serta BUMN<br>dan multinasional migas tambang dsbnya. |   |  |  |  |  |
| <ul> <li>Tender date (26/06/2018)</li> <li>Tender date (25/06/2018)</li> <li>Tender date (23/06/2018)</li> <li>Tender date (23/06/2018)</li> </ul>  | Silahkan Klik area untuk melihat tender by lokasi Propinsi  | Your Reliable Partner in Piping,<br>PT. Mitra Galperti is a trading and stockiest<br>of completed range of Piping |  |  |  |  |

| TENDER                   | RINFORMATION  |
|--------------------------|---|
| Sorted I                 | by Project Location   |
| PROPIN                   | SI : JAWA BARAT   |
| Catering (               | & Accommodation Service   |
| Paniti<br>Pendi<br>(Tend | er proyek (13-04-2017) <b>Pengadaan Konsumsi Peserta,</b><br>ia, Tenaga Pengajar, Coach, Mentor dan Penguji Kegiatan<br>dikan dan Pelatihan Balai Diklat BNN TA. 2017<br>er No. 531346)<br>ik proyek : Badan Narkotika Nasional |
| Civil Cons               | truction  |
| Jaring<br>(Tend          | er proyek (13-04-2017) <i>Pengadaan dan Pemasangan Pipa<br/>gan Distribusi Jalan Raya Pekapuran Cimanggis Depok</i><br>er No. 5289034)<br>ik proyek : Kota Depok  |
| Jaring<br>(Tend          | er proyek (13-04-2017) <b>Pengadaan Dan Pemasangan</b><br><b>jan Pipa Perumahan Alamanda</b><br>er No. 5288034)<br>ik proyek : Kota Depok   |

#### 2.5.2. Information Service Project Update

This information service contains subject list and description of upcoming projects. The information includes:

- 1. Company / Agency / Institute Project Owner
- 2. Project Description
- 3. Project Value
- 4. Project Owner
- 5. Project Schedule

#### How to Sort Project Update Per Date

Like Tender Information, we also create a sorting method to make it easier for you to find information about upcoming projects.

| (021) 6230 2979   | 🖾 info@tender-indonesia.com 🔍 🍳         |
|---|---|
| TENDER INDONESIA PROJECT<br>UPDATE HOME TODAYS TENDER                               | PROJECT UPDATE INDEX LOGOUT ABOUT US    |
| Project Update All Category   |   |
| 24-Dep2016, OIL AND GAS<br>PELELAINGAIN ULANG 14 LAPANGAN MINYAK DAN GAS            | PROJECT UPDATE CATEGORY<br>AGRICULTURE  |
| 24-Deo-2016, MANUFACTURE<br>PEMBANGUNAN PABRIK BAN                                  | AIR TRANSPORTATION                      |
| 24-Deo-2018, FINANCIAL<br>PROYEKSI ANGGARAN BADAN PENGUSAHAAN (BP) BATAM TAHUN 2017 | BREAKING NEWS<br>BUSINESS ENTERTAINMENT |
| 24-Ded2016, INFRASTRUCTURE<br>PEMBANGUNAN PASAR PELITA, SUKABUMI                    | BUSINESS PEOPLE<br>CHEMICAL             |
| 24-Deo-2018, MEDICAL SERVICE & EQUIPMENT<br>PEMBANGUNAN GEDUNG BARU DI RSOB, BATAM  | COMPUTER, IT & TELECOMUNICATION         |
| 24-Ded2016, INFRASTRUCTURE<br>PEMBANGUNAN DERMAGA CURAH DI PELABUHAN KABIL, BATAM   | DEFENSE INDUSTRY                        |
| 24-Deo2016, INFRASTRUCTURE<br>PEMBANGUNAN INSTALASI PENGELOLAHAN AIR LIMBAH (IPAL)  | EDUCATION                               |
| 24-Deo2016, INFRASTRUCTURE<br>PEMBANGUNAN AWAL LRT BATAM                            | FINANCIAL                               |

#### Sort Project Update By Category

In addition to sorting by date, you can also search for upcoming project info by category:

- 1. Agriculture
- 2. Air Transportation
- 3. Breaking News
- 4. Business Entertainment
- 5. Business People
- 6. Chemical
- 7. Computer, IT &

#### Telecomunication

- 9. Defense Industry
- 10. Education
- 11. Electricity
- 12. Financial
- 13. Geothermal
- 14. Heavy Equipment

#### 15. Info Tender

- 16. Infrastructure
- 17. Land Transportation
- 18. Logistic
- 19. Manufacture
- 20. Marine Transportation
- 21. Medical Service &

#### Equipment

- 23. Multiproject
- 24. Oil and Gas
- 25. Otomotif
- 26. Peluang Bisnis
- 27. Petrochemical
- 28. Property

## Category : OIL AND GAS

13-Feb-2017, OIL AND GAS PEMBANGUNAN PABRIK BIOAVTUR

13-Feb-2017, OIL AND GAS ALOKASI BELANJA MODAL (CAPITAL EXPENDITURE/CAPEX)

13-Feb-2017, OIL AND GAS PEMBANGUNAN TRAIN 3 TANGGUH

10-Feb-2017 OIL AND GAS PENGOLAHAN KILANG MINI KLASTER MALUKU

10-Feb-2017, OIL AND GAS PENGOLAHAN KILANG MINI KLASTER RIAU

10-Feb-2017, OIL AND GAS PENGOLAHAN KILANG MINI KLASTER SELAT PANJANG MALAKA

10-Feb-2017, OIL AND GAS PENGOLAHAN KILANG MINI KLASTER SUMUT

08-Feb-2017, OIL AND GAS PEMBANGUNAN JARGAS DI BONTANG

06-Feb-2017, OIL AND GAS PEMBANGUNAN JARGAS DI SAMARINDA

04-Feb-2017, OIL AND GAS PEMBANGUNAN INFRASTRUKTUR PIPA GAS TERINTEGRASI DI KALIMANTAN TIMUR

31-Jan-2017, OIL AND GAS PEMBANGUNAN NGRR TUBAN

31-Jan-2017, OIL AND GAS PEMBANGUNAN RDMP RU IV CILACAP

#### 2.5.3. Information Service Tender Award

This information service contains details of the tender winner. The information includes:

- 1. Project Company Winner
- 2. Project Description
- 3. Project Value

| TEND   | ER AWARD   |       |
|--------|--|-------|
| Agun   | er Award : <b>Preservasi Rekonstruksi Jalan Sang</b><br>I <b>g - Sungai Penuh - Bts. Prov. S</b> (11/02/2017 )<br>Construction | jaran |
| РТ. 🖷  | LAR TERMANNET  |       |
|        | IPWP:  |       |
| Alam   | at :   | -     |
| 25     | pade en 1812 chera Canadran Sana Pan, de reproper  |       |
| Web    | site : -   |       |
| Email  |  |       |
| Cont   | act :  |       |
| Harg   | a : Rp 21.528.479.000,00   |       |
| Linter | k malibat tandar kik s dirini  |       |
| Untu   | k melihat tender klik : <b>disini</b>  |       |

#### Sort Tender Award By Date

The amount of information is also very much every day. So we also provide sorting method to simplify you.

| SORT TENDER AWARD  | D CHUN                                 |                      | MEMBERS BULETIN   |
|--|--|----------------------|---|
|  | DOWN                                   | ILOAD                | PT. Kemenangan  |
| Tender Award by Category   | AWARD                                  | DEDODT               |   |
| - Agro, Farm & Fishery   | AWARD                                  | REPORT               |   |
| - Air Transportation, Air Navigation   |  |                      |   |
| & Equipment, Airport Facility  | TENDER IN                              | FORMATION            | - HEARD   |
| <ul> <li>Books &amp; Printing</li> <li>Catering &amp; Accommodation</li> </ul> |  | 0 00000000000000000  | PVC Hose KEMANFLEX, PVC   |
| Service  |  |                      | HOSE KEMANFLEX PVC and Rubber<br>Hose #6¢ KEMANFLEX NYLON                     |
| - Chemical, Coating Paint &  |  |                      | REINFORCED (KF  |
| Lubricant  | TENDER AWARD                           |                      |   |
| <ul> <li>Civil Construction</li> <li>Computer, IT,</li> </ul>                  | TENDER AWARD                           |                      | PT RIRE SANJAYA SAKTI   |
| Telecommunication & Multi Media  | Berikut ini ada daftar pemenang tender | berdasarkan tanggal. |   |
| - Consultant   |  |                      |   |
| Electricity, Power Generation,   | 1. 2017-02-13                          | 2. 2017-02-11        |   |
| Transmission, Distribution &<br>Lighting                                       | 3. 2017-02-10                          | 4. 2017-02-09        | PT. RIRE SANJAYA SAKTL ROPE   |
| - Engineering, Procurement,  | 5. 2017-02-08                          | 6. 2017-02-09        | ACCESS INSPECTION & NDT   |
| Construction & Fabrication   | 7. 2017-02-04                          | 8, 2017-02-03        | SPECIALIST PT. Rire Sanjaya Sakti is a<br>specia                              |
| Services<br>- Forwarding & Logistics Services                                  | 9. 2017-02-02                          | 10. 2017-02-01       | abana m   |
| - Forwarding & Logistics Services  | 11, 2017-01-31                         | 12. 2017-01-30       | PT. PRATAMA MITRA SEJATI  |
| - Heavy Equipment & Services   | 13. 2017-01-27                         | 14. 2017-01-26       |   |
| - HSE Equipment - Services,<br>Potable Water & Waste                           | 15. 2017-01-25                         | 16. 2017-01-24       |   |
|  | 17. 2017-01-23                         | 18. 2017-01-21       |   |
| Management<br>- Insurance & Financial Services                                 | 19. 2017-01-20                         | 20. 2017-01-19       | PT. PRATANA WITH SEATS  |
| - Laboratory Calibration Services &  | 21. 2017-01-18                         | 22. 2017-01-17       | Excellent Service, Anywhere   |
| Equipment  | 23. 2017-01-16                         | 24. 2017-01-14       | Anytime , Jasa Sewa Kendaraan Ringan  |
| - Land Transportation & Services,  | 25. 2017-01-13                         | 26. 2017-01-12       | Penumpang Harga kompetitif, pelayanan   |
| Traffic Light & Signs  | 27. 2017-01-11                         | 28. 2017-01-10       | cepat, te   |
| <ul> <li>Man Power Supply</li> <li>Marine Transportation &amp;</li> </ul>      | 29. 2017-01-09                         | 30. 2017-01-07       | PT. MITRA GALPERTI  |
| Equipment, Docking, Port   | 31. 2017-01-06                         | 32. 2017-01-05       |   |
| Equipment  | 33. 2017-01-04                         | 34. 2017-01-03       |   |
| <ul> <li>Mechanical Equipment &amp; Spare<br/>Parts</li> </ul>                 | 35. 2016-12-31                         | 36. 2016-12-30       |   |
| - Mechanical Services & Underwater   | 37. 2016-12-29                         | 38. 2016-12-28       | 19 8 - ES & C & C   |
| Work   | 39. 2016-12-27                         | 40. 2016-12-24       | and the second  |
| - Medical Equipment  | 41. 2016-12-23                         | 42. 2016-12-22       | 10 C 10 C 10 C  |
| - MICE, Advertising & Travel   | 43. 2016-12-21                         | 44. 2016-12-20       |   |
| - Office Support Equipment   | 45. 2016-12-19                         | 46. 2016-12-17       | Your Reliable Partner in Piping.  |
| - Others   | 47. 2016-12-16                         | 48. 2016-12-15       | PT. Mitra Galperti is a trading and stocklest<br>of completed range of Piping |
| <ul> <li>Pipe, Casing, Valve, Tools &amp;<br/>Hardware</li> </ul>              | 49. 2016-12-14                         | 50. 2016-12-13       |   |
| - Police & Military Equipment  | 51. 2016-12-10                         | 52. 2016-12-09       | PT MIR INDONESIA  |
| - Pump Compressor  | 53. 2016-12-08                         | 54. 2016-12-07       |   |
| - Railway & Train  | 55. 2016-12-06                         | 56. 2016-12-05       | mu  |
| <ul> <li>Seismic, Driling &amp; Well Service</li> </ul>                        | 57. 2016-12-03                         | 58. 2016-12-02       |   |
| <ul> <li>Sensor, Metering &amp;<br/>Instrumentation Control</li> </ul>         | 59. 2016-12-01                         | 60. 2016-11-29       | ano brand co infinite truet   |
| - Survey Inspection Services &   | 61. 2016-11-28                         | 62. 2016-11-26       | PT MIR INDONESIA. MIR VALVE is a  |
| Equipment  | 63. 2016-11-25                         | 64. 2016-11-24       | top-tier manufacturer offering the complete                                   |
| - Uniform  | 65. 2016-11-23                         | 66. 2016-11-22       | range of ball an  |
|  | 67. 2016-11-21                         | 68. 2016-11-19       | PT, Anugrah Jasa Caterindo  |
| Business Information   | 69. 2016-11-18                         | 70. 2016-11-17       |   |
|  | 71. 2016-11-16                         | 72. 2016-11-15       |   |
|  | 73. 2016-11-14                         | 74. 2016-11-12       |   |
|  | 75. 2016-11-09                         | 76. 2016-11-08       | 143   |

77 | www.tender-indonesia.com

#### Sort by Category

In addition to per date, you can also sort by project category. The Tender Award has the same 34 categories as Tender Information (see section 5.1.2.).

| TENDER AWARD   | TENDER AWARD  |
|--|---|
| ivil Construction  | Marine Transportation & Equipment, Docking, Port Equipment  |
| Tender Award : Kementrian Pekerjaan Umum (13/02/2017 )<br><i>Pemeliharaan Rutin Danau Melintang (1 Buah) Kabupaten Kutai<br/>Kartanegara</i><br>Cahaya Sengkang, Harga Penawaran : Rp 480.000.000,00           | Tender Award : Kota Tidore Kepulauan (12/04/2017)<br><i>Pengadaan Jet Sky</i><br>CV.DWI JAYA LESTARI, Harga Penawaran : Rp 593.120.000,00                     |
| Tender Award : Kementrian Pekerjaan Umum (13/02/2017 )   | Tender Award : Kota Singkawang (11/04/2017)   |
| Pemeliharaan Berkala D.I.R. Tanjung Buka 1-2 (6 Km/75 Ha)  | <b>Pengadaan Kapal Motor di Bawah 3 GT</b>  |
| Kabupaten Bulunga  | CV. G.O. GROUP, Harga Penawaran : Rp 698.974.400,00   |
| CV. MUSTIKA JAYA KENCANA, Harga Penawaran : Rp   | Tender Award : Kota Palopo (11/04/2017)   |
| 903.241.000,00   | <i>Pengadaan kapal + mesin PK 28</i>  |
| Tender Award : Kementrian Pekerjaan Umum (13/02/2017 )   | CV. ANUGRAH CITRA PERSADA, Harga Penawaran : -  |
| Pemeliharaan Berkala D.I.R. Tanjung Buka SP8 (6 Km/75 Ha)  | Tender Award : Kota Padang (11/04/2017)   |
| Kabupaten Bulunga  | <i>Pengadaan mesin Tempel 15 PK, 40 PK, 85 Pk dan 100 PK</i>  |
| MUTIARA TIMUR, CV, Harga Penawaran : Rp 939.978.000,00   | Cv. Faura Abadi, Harga Penawaran : -  |
| Tender Award : Kementrian Pekerjaan Umum (13/02/2017 )<br><i>Pemeliharaan Berkala D.I.R. Anggana (9 Km/80 Ha) Kabupaten</i><br><i>Kutai Kartanegar</i><br>Cahaya Sengkang, Harga Penawaran : Rp 647.987.000,00 | Tender Award : Kota Batam (10/04/2017)<br><i>Pengadaan Mesin Boat 2 x 50 HP beserta accesories</i><br>CV. DELTA KHARISMA, Harga Penawaran : Rp 270.600.000,00 |
| Tender Award : Kementrian Pekerjaan Umum (13/02/2017 )   | Tender Award : Kota Batam (10/04/2017)  |
| <i>Pemeliharaan Berkala D.I.R. Petung (9 Km/80 Ha) Kabupaten</i>   | <i>Pengadaan Perahu (Boat Pancung)</i>  |
| <i>Penajam Paser Uta</i>   | CV. NOFHA ANGGERDIKHA, Harga Penawaran : Rp   |
| SAFIRA JAYA, Harga Penawaran : Rp 810.179.000,00   | 399.620.000,00  |
| Tender Award : Kementrian Pekerjaan Umum (13/02/2017 )   | Tender Award : MABES POLRI (08/04/2017)   |
| <i>Pemeliharaan Berkala D.I.R. Sukan (8 Km/75 Ha) Kabupaten</i>  | <i>Pemeliharaan Kapal Latih dan Kapal Penyeberangan Pusdik Pol</i>  |
| Berau  | <i>Air</i>  |
| NENE MALLOMO, Harga Penawaran : Rp 836.598.000,00  | CV.RATU MINA PERSADA, Harga Penawaran : -   |
| Tender Award : Kementrian Pekerjaan Umum (13/02/2017)  | Tender Award : Kementerian Perhubungan (07/04/2017)   |
| <i>Pemeliharaan Rutin D.I.R. Sebakung (10 Km/3.000 Ha)</i>   | - <i>Replacement Rambu Suar 10 Meter Laut Rangka Baja</i>   |
| <i>Kabupaten Penajam Paser</i>   | Digalvanis : Lokasi Kr.   |
| CV. MEDINA, Harga Penawaran : Rp 654.892.000,00  | Madellim, Harga Penawaran : -   |
| Tender Award : Kementrian Pekerjaan Umum (13/02/2017)<br><i>Pemeliharaan Rutin D.I.R. Labangka (8 Km/3.000 Ha)</i><br><i>Kabupaten Penajam Paser</i><br>CV. MEDINA, Harga Penawaran : Rp 634.184.000,00        | Tender Award : Kementerian Perhubungan (07/04/2017 )<br><i>Pemeliharaan Kapal Patroli KII.464</i><br>CV.GALINDO, Harga Penawaran : -                          |

### 2.5.4. Non Information Service Tender Consulting

#### Scope Of Services

One of our Non Information Services is Tender Consulting Service. This service is to help domestic and foreign companies who want access to certain market. We provide consultation in the phases of the work plan, which will simplify and accelerate in marketing your products to Indonesia.

#### Kind of Services

For example, if you have a specific equipment product or technology, and want to enter the Indonesian market. So we will help:

- 1. Review your product whether it has its market demand in Indonesia.
- 2. If it has the demand, then based on our wide network, we will recommend potential buyers and users, either directly or via contractors or via local suppliers.
- 3. Then, we will facilitate the meeting and presentation of your product to the potential buyer.
- 4. The price of this service is very varied and case by case. Considering the wide variously of potential buyers and also type of each product category is unique. For further information please contact us at: Phone number : 0812 8224 8240 Contact Person : Tito Loho Email : <u>info@tender-indonesia.com</u>

### 2.5.5. Non Information Service Tender Licensing

In order to participate in the project tender, the company must comply with legal, administrative, and financial required. Each agency (project owner) has a general provision that relatively the same and also has different specific provisions of each field.

### **General Requirements**

Some general requirements that must be fulfilled, including: Deed of Establishment & Amendment, Decree of The Minister of Legal Affairs, Indonesian Taxation such as NPWP, SKT Tax, and PKP, SIUP apropriate fields, and TDP.

#### **Special Requirements**

There are several sectors such as oil and gas, mining, electricity, infrastructure, telecommunication, in the tender process demand that the bidders have several requirements for document eligibility. Such as:

- 1. Oil and Gas
  - SKUP
  - CSMS
  - ISO 9001 : 2015
  - ISO 14001
  - OHSAS
- 2. Mining
  - Mining Services Business License (IUJP)
- 3. Infrastructure
  - Certificate of Expertise (SKA)
  - Association Membership
  - Certificate of Business Entity (SBU)
  - Construction Service Business License (IUJK)
  - Safety Management System, and Occupational Health (SMK3)
- 4. Electricity
  - Certificate of Competence (SERKOM)
  - Certificate of Power Business Entity (SBUPTL)
  - Electricity Support Service Business License (IUJPTL)

We can provide consultation from the initial stage of establishing a business entity up to completing the detailed requirements documentation to be eligible for the tender. For any questions related to this can contact:

Phone Number : 0813 8000 1718

CP : Sarah Maryatie

# 2.6. Our Services Matrix For Member and Non Member.

Here is presented our service matrix for both member and also non member.

| LAYANAN<br>PENGGUNA                | Tender<br>Information | Tender<br>Award | Project<br>Updates | Tender<br>Statistik | Tender<br>Licensing |
|------------------------------------|-----------------------|-----------------|--------------------|---------------------|---------------------|
| MEMBER                             |                       |                 |                    |                     |                     |
| NON MEMBER /<br>UMUM (Gratis)      |                       |                 |                    |                     |                     |
| NON MEMBER /<br>UMUM<br>(Berbayar) |                       |                 |                    |                     |                     |

| LAYANAN<br>PENGGUN                 | Tender<br>Event<br>Organizer | Tender<br>Training<br>Course | Tender<br>Production<br>House | Tender<br>Partnership |
|------------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------|
| MEMBER                             |                              |                              |                               |                       |
| NON MEMBER<br>/ UMUM<br>(Gratis)   |                              |                              |                               |                       |
| NON MEMBER<br>/ UMUM<br>(Berbayar) |                              |                              |                               |                       |

|   | LAYANAN<br>PENGGUNA  | Tender<br>Multimedia | Tender<br>Publishing | Tender TV | Tender<br>Android<br>Apps |  |
|---|--|----------------------|----------------------|-----------|---------------------------|--|
|   | MEMBER   |                      |                      |           |                           |  |
|   | NON MEMBER /<br>UMUM (Gratis)  |                      |                      |           |                           |  |
|   | NON MEMBER /<br>UMUM<br>(Berbayar)   |                      |                      |           |                           |  |
| Member : Companies / Institutions / Institutions / Individuals<br>who subscribe to Membership |  |                      |                      |           |                           |  |
|   | www.tender-indonesia.comNon Member/Public: All users accessing www.tender-indonesia.comPaid / free: Types of services that can be accessed for free<br>or paid (case by case). |                      |                      |           |                           |  |

# 2.7. Our Services Compared With Other Services

# 2.7.1. What is the difference www.tender-indonesia.com with other similar service providers?

#### Cheaper

For the price of membership then another brand is much more expensive. Besides being more expensive, other brands also sell their information in group-by-sector packages. For example info project group infrastructure, different packages with oil and gas.

#### **Member's Facility**

Not so with www.tender-indonesia, which sells its information on a single package that already covers the entire sector to its members. What distinguishes us is that members who pay more expensive packages will get the facility to promote their products to project owners. We currently provide membership packages PREMIUM, GOLD, and PLATINUM.

#### **Business Matching**

Other brands are seen always displaying contact person for all the project info. However, if further examined then the contact person displayed it is too general like the Director of PLN, Pertamina Director, which is less specific including the contact numbers are also too general.

For this contact person, www.tender-indonesia.com takes a different approach. With the mission of "making sure the members get business opportunities", we try to bring the members together with the project owners.

This is good through various series of events that we held, or through the type of package we offer PLATINUM. As a member of PLATINUM, you will be assisted by our special team to hunt for the project. Even for companies (foreign) who want to start a business, then we provide services for "matching" with local partner / national we also provide (Matching partner).

#### **Other Superior Facilities**

And lastly, in addition to presenting the project tender information as well as the winners, the advantage is we also present PROJECT UPDATE (future project info but not yet tendered). This is for all types of membership.

Even the members can also get the full profile of the project owner's profile in PROJECT OWNER DIRECTORY. And download various info / data project that we though in SPECIAL REPORT header. Moreover, in various events that we held alone or working with other parties, it is a meeting place of the members with the project owner.

# 2.7.2. What is the advantage of <u>www.tender-indonesia.com</u> compared to LPSE?

#### Data More Stable

LPSE is not stable in data presentation. This is because LPSE only seems to be integrated, but the system behind it is coming from each procurement information unit separately. This means that LPSE is only FRONT PORTAL where the data presentation is done by officer and server of each agency page. So it is not strange if there is always a system down the sporadic essence of each agency in the LPSE information system.

For this reason, the division unit of <u>www.tender-indonesia.com</u> which retrieves data from LPSE, will access agency by institution regularly many times in a day, simply to ensure the accuracy and updated data we presented.

#### **Data Processed**

Unlike LPSE, the data we get will be done first before serving. This is so that members get ease in how to access.

We process the data into per group like:

- 1. Based on the date of the tender
- 2. Based on category of product tendered
- 3. Based on the tender owner
- 4. Based on the geographical location of the province where the tender takes place

So the members will easily and quickly get the information as desired.

#### Wider Data

We present project-related data that is much more extensive and profound than LPSE. Because we have access to information to various companies / agencies not in the LPSE.

Among these are project info from the energy sector, state-owned, multinational, and international organizations such as UN agencies and donor assistance.

#### More Benefits

If LPSE only provides project info, then we provide services in some type of membership. This allows you to get more advanced services than just info. Because in the GOLD and PLATINUM membership types, the members will be able to promote their products to the project owners.

#### **Other Superior Facilities**

And lastly, in addition to presenting the project tender information as well as the winners, the advantage is we also present PROJECT UPDATE (future project info but not yet tendered). This is for all types of membership.

Even the members can also get the full profile of the project owner's profile in PROJECT OWNER DIRECTORY. And download various info / data project that we though in SPECIAL REPORT header. Moreover, in various events that we held alone or working with other parties, it is a meeting place of the members with the project owner.

# **INDONESIA**







# PROJECT





# **OPPORTUNITIES**



Address : Rukan Karang Anyar Permai Baru Blok C No. 21, Jakarta Pusat 10740 Telp. 021 62302979 - 021 6247372 Fax. 021 62302980 - 021 6247371 email : info@tender-indonesia.com