Building Local EPC Companies

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Jakarta, May 7th, 2015

TRIPATRA
A member of Indika Energy Group

Tripatra Overview

Tripatra has provided engineering, procurement & construction (EPC) services in Indonesia since 1973 with full range of engineering and project management solutions to serve world-wide clients across various sectors of Oil & Gas, Downstream & Petrochemical, Mining, and Infrastructure.

Vision

To be a world-class company providing integrated innovative engineering solutions through excellent multidiscipline engineering

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Strong Track Record with reputable Clients across Sectors

Oil & Gas	ExxonMobil, ConocoPhillips, Chevron, HESS, bp, Star Energy, Pertamina
Downstream and Petrochemicals	Dow, Arun LNG, PT. Arun NGL, Gas Negara, Pertamina Gas, Samtan
Mining	FMI, Inco, Bukit Asam, Antam
Infrastructure	PLN, Telkom, Indosat, Telkomsel, XL

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Partnership with World-class Players

Toyo Engineering Corporation
FLUOR
CHIYODA
SANDVIK
EMAS
Eni Saipem
HATCH
Tecnimont
SARKU
Marubeni CORPORATION
SAMSUNG ENGINEERING
SBM OFFSHORE
ELECTROWATT
Allseas
kemira
RCE RIVER CITY ENGINEERING
Sargent & Lundy LLC
FOSTER WHEELER
McDermott International, Inc.
KANEMATSU CORPORATION
KNM Group Berhad

GAPENRI Overview

Gapenri is an association on national professional integrated construction services in Indonesia, an open organization to all national as well as overseas Engineering-Procurement-Construction (EPC) companies. Our mission is to be an association of Indonesian world class professional and reliable EPC companies. Key objectives:

- To promote Indonesian EPCI market is widely accessible for local EPCI Companies
- To ensure knowledge-transfer process of high technology system takes place from technology owner to local EPCI
- To ensure strong supervisory and management functions for procuring process and implementations of EPCI projects in Indonesia
- To promote development of EPCI's supporting businesses in Indonesia

Local EPC companies face 5 major challenges

1 **Financial Capacity & Capabilities**

- Local EPC companies don't have strong capital for tender of big projects, leading to consortium led project. This causes problems because of multiple interfaces
- Local EPC companies are only involved in simple projects or simple scope of work in project, mostly in construction phase

- **The condition has attracted foreign direct investment (with maximum of 95% foreign shareholding)**

2 **Tender Policy**

- Current procurement policy incentivize lowest cost bidder, creating unhealthy competition to bid each other out
- Quality and capability building are not prioritized

- **Put more pressure to "low-cost" bidders whereby to put priority on winning a bid in lieu for quality**
- **The 2014 Global Innovation Index (GII) ranks Indonesia 87th out of 143 countries in terms of innovation capability – still lags behind several of its ASEAN neighbors**

Source: PII analysis, Gapenri data, SKK Migas and other sources

Local EPC companies face 5 major challenges

3 **Qualified frontline workers**

- Shortage of qualified frontline workers such as welders, electricians, masons

- **World Bank and BPS have predicted that the country will suffer a shortage of 10 million skilled workers by 2025**
- **To achieve a modest target of 6 percent annual GDP growth, Indonesia will require around 50 mn skilled workers**

4 **Qualified Engineers**

- Shortage of engineers in Indonesia

- **Short of 30,000 new engineers every year to help build infrastructure**
- **Currently has 2,671 engineers per one million of its population. In comparison, Malaysia and Thailand have 3,334 and 4,421 engineers**
- **In 2012, engineering undergraduates accounted for just 11 percent, or 1.05 million, or the 9.6 million undergraduates at universities nationwide**

Source: PII analysis, Gapenri data, SKK Migas and other sources

Local EPC companies face 5 major challenges

5

Complex stake-holders

- Complex stakeholders environment for EPC project in Indonesia

- **Indonesian EPC project stakeholders involve Government (Central and Regions), Operators/ K3S, partners/ consortiums, and chain of suppliers**

Source: PII analysis, Gapenri data, SKK Migas and other sources

Recommendations

In order to create value added, resilience, and sustainability to the Indonesian economy, Government shall have supportive government policy in order to increase the capacity and competencies of Indonesian owned EPC companies via, among others:

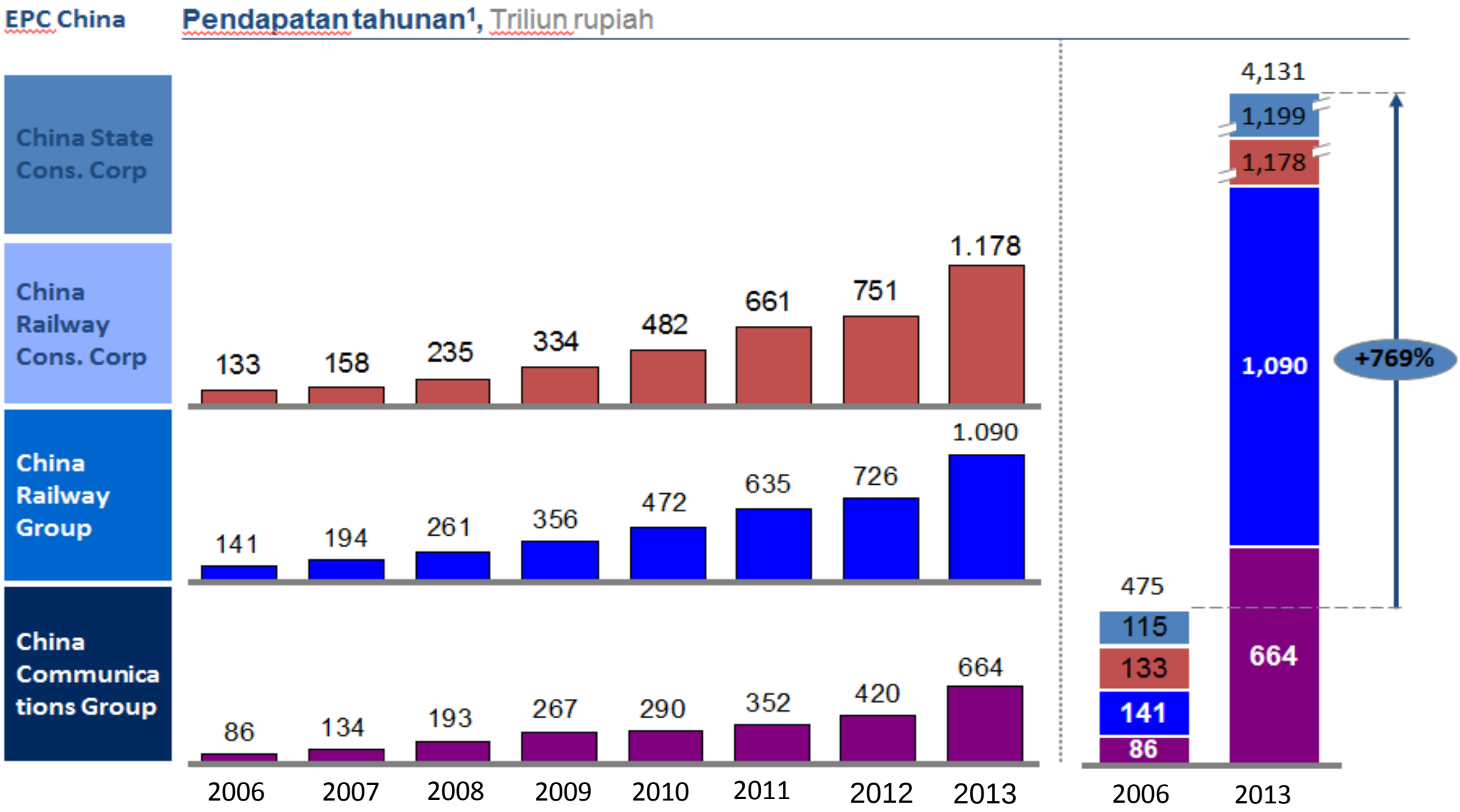
1. **To have Laws and Regulations favourable to local EPC Companies [China]**

1. **To accelerate local talent development [Engineer]**

1. **Improve Fiscal regime : Reduce Final Tax 3% and Remove WAPU VAT Regulation**

2. **Increased use of domestic products (with increasing % of negative list year by year)**

Empat Besar Perusahaan EPC China Meningkatkan Pendapatan Tahunan sebesar 769% Dalam Kurun Waktu 7 Tahun



1 Kurs rata-rata tahunan 1 USD ke rupiah: 9200 (2006), 9125 (2007), 9666 (2008), 10300 (2009), 8920 (2010), 8700 (2011), 8875 (2012)
SUMBER: ENR, McKinsey, BI

Gambaran Kapabilitas Industri EPC Nasional Dibandingkan EPC Kelas Dunia

Tantangan

- Total pendapatan dari **13 perusahaan EPC lokal** terbesar di Indonesia hanya sebesar **73T** rupiah
- Total pendapatan dari **40,000 perusahaan kontraktor umum dan spesialis** sebesar **50T** rupiah
- Total pendapatan dari mayoritas perusahaan lokal hanya **123T rupiah** (**26%** dari pengeluaran infrastruktur tahun 2015)
- Total pendapatan dari **14 perusahaan EPC global** sebesar **111 kali** dari total pendapatan **14 perusahaan EPC local**

Pendapatan tahun 2013 (EPC lokal vs EPC global)

SUMBER: Buku Putih PII, GAPENRI, LPJKM, McKinsey; ENR

Laws..

Peningkatan Ketersediaan Jumlah dan Kemampuan SDM Insinyur Indonesia

Upaya Mempercepat Pemenuhan Kebutuhan Tenaga Terampil Keteknikan

1 ***Tantangan Inovasi dengan R&D***

1. **Inovasi Teknologi** membangun kemandirian dan nilai tambah industri pendukung infrastruktur, menggantikan produk impor.
2. **P**emerintah membangun litbang (R&D) melalui kerjasama Perti , Industri (ABG) serta memberikan insentif bagi perusahaan EPC/ Kontraktor yg mengembangkan R & D

2 ***Sumber SDM dari Dalam Negeri***

3. **Program sertifikasi Insinyur Profesional** untuk Sarjana teknik dan SDM Teknik non-ST
4. **Sosialisasi** meningkatkan minat pelajar SMA ke Perti teknik, ketepatan waktu studi dan agar tetap berprofesi di keinsinyuran.
5. **Peningkatan kapasitas Perti** dalam proses skripsi sesuai kebutuhan dan percepatan pembukaan prodi penyelenggaraan Program Profesi Insinyur (PPI)

3 ***Sumber SDM dari Luar Negeri***

6. **Program Diaspora Insinyur Indonesia** dengan mencontoh model Talentcorp Malaysia dengan memberikan insentif bagi para profesional yang kembali ke Indonesia (keringanan pajak, tempat tinggal bagi pasangan dan anak, dll.)

4 ***Kualitas dan Ketersediaan Lapangan Pekerjaan***

7. **Peningkatan Kualitas Remunerasi** dalam pembangunan industri manufaktur pendukung serta industri konstruksi nasional

SUMBER: Buku putih PII, DIKTI, Project Management Institute