

Country Report

Development of Leading Industry Based on High Technology in Indonesia

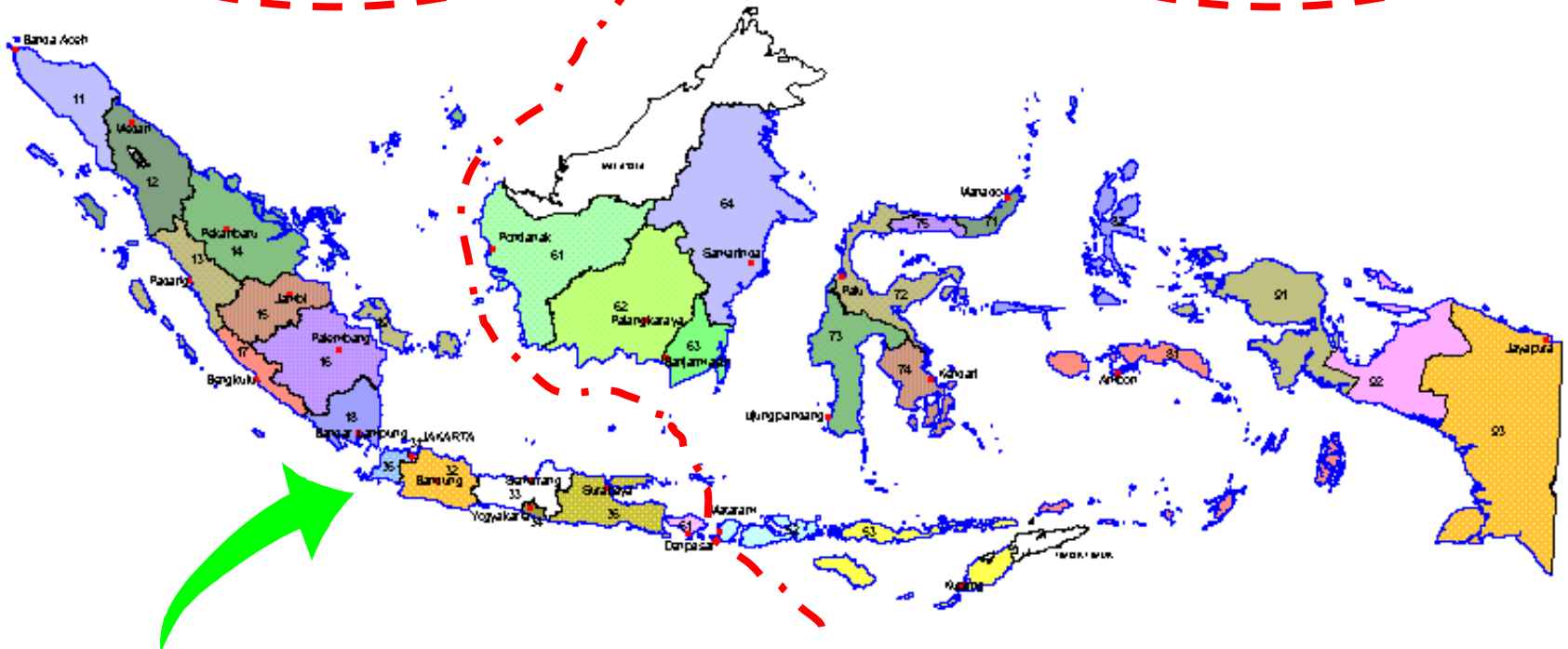


1st Meeting of High Council of D-8 Technology Transfer and Exchange Network (TTEN)
Teheran, 7-9 October 2013

WEST INDONESIA		EAST INDONESIA	
AREA	: 32,48 %	AREA	: 67,52 %
Σ POPULATION	: 81,32 %	Σ POPULATION	: 18,68 %
Σ REGULATION	: 95,56 %	Σ REGULATION	: 4,44 %

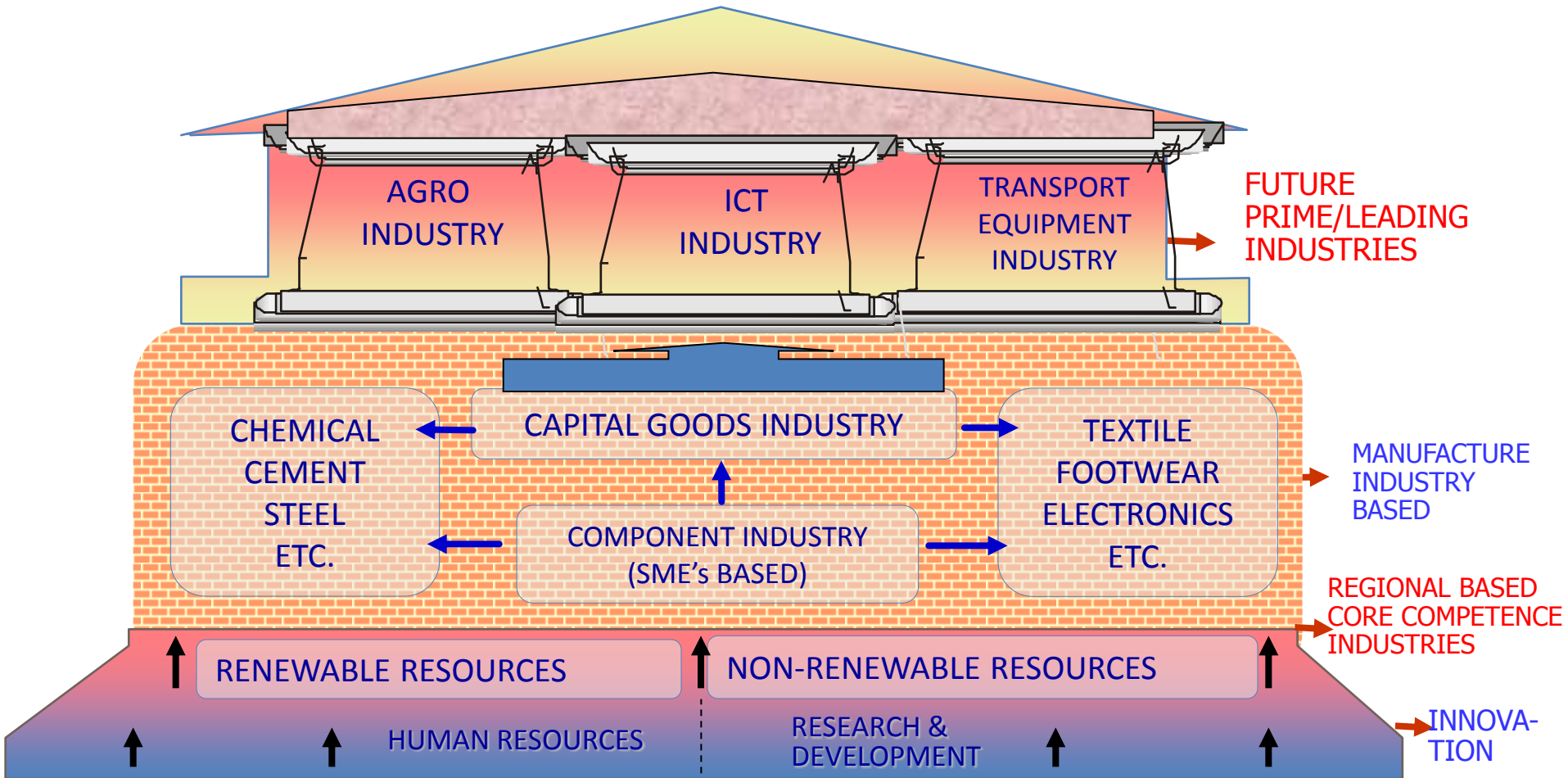
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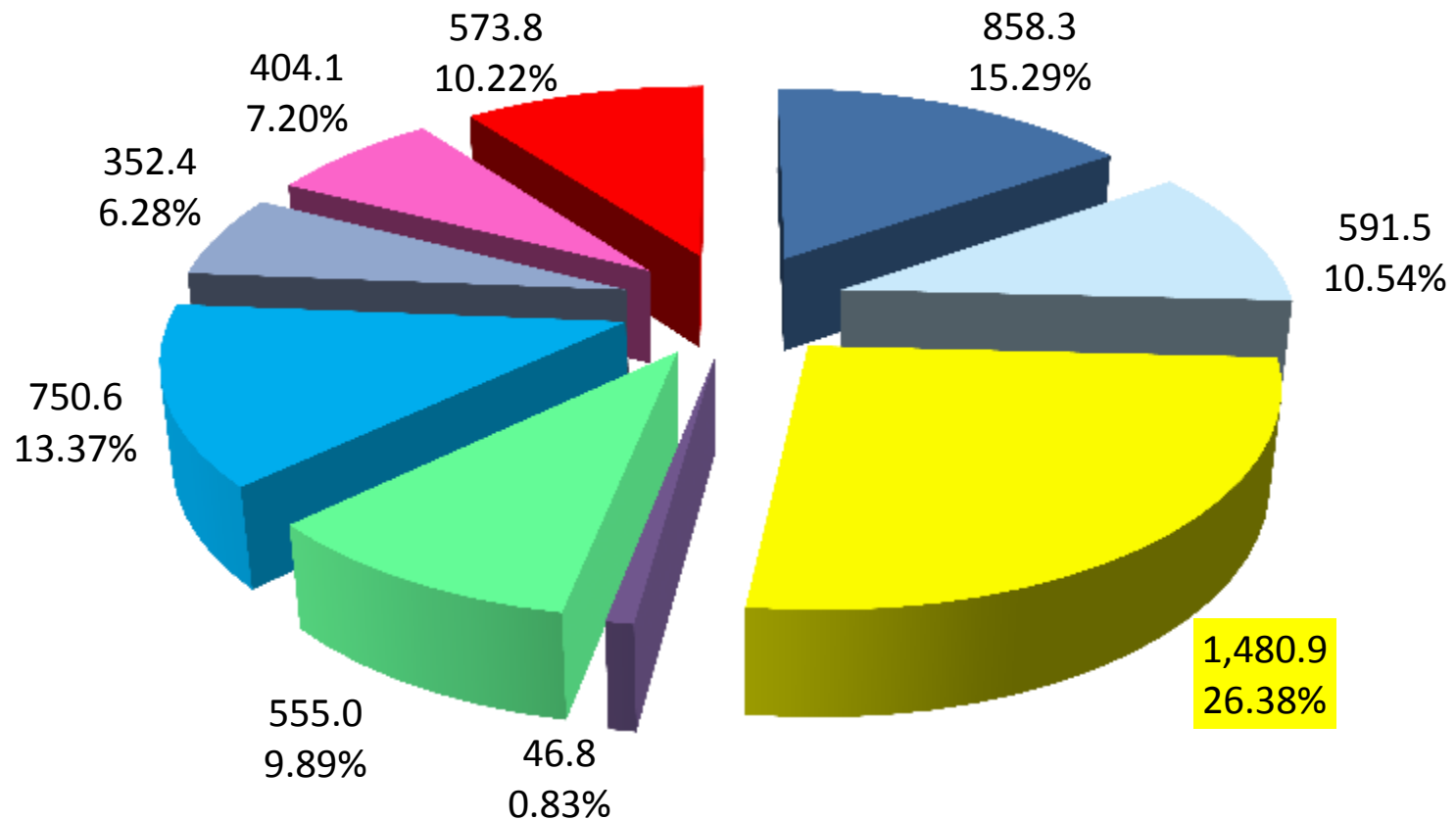
AREA	:	7,0 %
Σ POPULATION	:	60 %
Σ REGULATION	:	90 %

FUTURE INDUSTRY'S STRUCTURE (Year 2025)



The Role of Manufacturing Sector

(Contribution to PDB, In Trillion Rupiah)



- 1. Agriculture, Livestock, Forestry and Fishery
- 3. Manufacturing Industry
- 5. Construction
- 7. Transportation and Communication
- 9. Services

- 2. Mining and Quarrying
- 4. Electricity, Gas and Water supply
- 6. Trade, Hotel and Restaurant
- 8. Financial, Ownership and Bussines Services

Source : Statistical Centre Bureau (BPS)
- 2009

6 Priority Industries

Natural Resources Based Industry :

1. Palm based Downstream Industry
2. Cacao based Downstream Industry
3. Rubber based Downstream Ind.
4. Metal Upstream Industry
5. Seaweed based industry

Small and Medium (SME) Industry

Capital Goods Industry

Labour Intensive Industries :

1. Textile and Textile Product Industry
2. Footwear Industry
3. Furniture Industry

High Growth Industry:

1. Electronic Industry
2. ICT Industry
3. Automotive Industry

Specific Priority Industry

1. Sugar based Downstream Industry
2. Fertilizer Industry
3. Petrochemical Industry



Electronic & ICT Industry Development Target

2010

- ❑ Toward Digital/ICT based and environment friendly products.
- ❑ Financial and Management Software Application , Animation and Content Industry
- ❑ Computer industry



2015

- ❑ Manufacturing Software Application, Animation and Content Industry
- ❑ Digital/ICT based and environment friendly products and component developed
- ❑ Computer component industry and its supporting industries
- ❑ Wireless communication products (Mobile phone, 4G Application)



2020

- ❑ Shopisticated Software Application, Animation and Content Industry already developed
- ❑ Electronic and ICT Products using nano technology
- ❑ Local Telecommunication Industry plays significat role in domestic as well as international market



2025

- ❑ Domestic Software Application, Animation and Content Industry dominate domestic and regional markets.
- ❑ Domestic wireless telecommunication industry has high competitiveness in domestic market and global market
- ❑ Indonesia become production base for consumers electronics and control/measurement devices industry in ASEAN and Asia



Area of Cooperation:

1. ICT system for road transportation (Electronic Toll card system,etc)
2. Digital base Electronic Industry
3. Mobile Phone Industry

Automotive Industry Development Target

2010



- MPV, Light Commercial Truck.
- 80% design of motor cycle.

- Manufacture of engine, transmission for MPV and Light Commercial Truck.
- Supplier of component for MPV and Light Commercial Truck.

Area of Cooperation :

1. Green Car Industry
2. Base Production for certain Model of Vehicle

2015



- MPV, Commercial Truck s/d 24 ton, SUV and small economical sedan.
- 80% design of 4W motor vehicle for MPV and Light commercial truck.

- Manufacture of engine, transmission for Commercial Truck up to 24 ton, SUV and small economical sedan .
- Supplier of component for Commercial Truck up to 24 ton, SUV and small size sedan.

2020



- 80% design of 4W motor vehicle for sedan and SUV.
- Hybrid engine, ECU integration system.
- Commercial truck component > 24 ton, Medium size sedan, Hybrid car.

- MPV, SUV, Small economical sedan, Commercial truck > 24 ton, Medium size sedan, Hybrid car.

2025



- MPV, SUV, Small economical sedan, Commercial truck > 24 ton, Medium size sedan, Hybrid car and Luxury car.
- 80% design of 4W motor vehicle for medium size sedan.
- Manufacture of luxury car quality component.
- Supplier of luxury car quality component.

Shipbuilding Industry Development Target

2010

- Capable to build any kind of ships (commercial ships, passenger ship, working ships) up to 50,000 dwt
- National shipbuilding and Engineering Center (NasDEC)

2015

- Capable to build any kind of ships (commercial ships, passenger ship, working ships) up to 80,000 dwt
- Design and engineering capability increase

2020

- Capable to build any kind of ships (commercial ships, passenger ship, working ships) up to 200,000 dwt
- Design and engineering capability increase

2025

- Capable to build any kind of ships (commercial ships, passenger ship, working ships) up to 300,000 dwt
- Design and engineering capability increase



investment on big size shipyards, ship equipment and ship component industry to supply domestic market as well as export

KKIGK Karimun Island

KKIGK Lamongan, East Java

KKIGK= Shipbuilding Industrial Zone



Area of Cooperation :

- Exchange employees of shipbuilding companies between Indonesian and Korea to Improve the quality of human resources
- Join operation of ship design such as : basic design, contract design, and Detail Engineering Drawing (DED) for the ship that built in Indonesia
- Join Operation and/or Foreign Direct Investment for developing shipyard to produce a good quality of new shipbuilding in Indonesia
- Join Operation and/or Foreign Direct Investment in ship equipment and ship component industry to supply domestic market as well as export.

Machinery Industry Development Target

2010

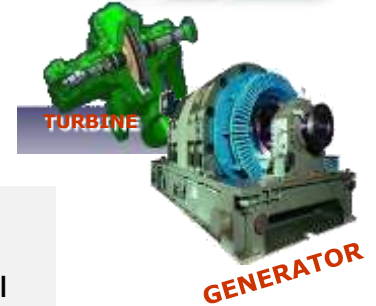
- Spread and improvement of agricultural machinery industries outside Java, one of the efforts is establishing center of agricultural machinery
- Reestablishment of national tooling machine industry, although still limited within certain specification product
- Establishment Medical Device Industries in Indonesia

2015

- Realization of turbine manufacturing in power plant as well as industrial purposes
- Realization of some of the use of machine-made equipment in the country in a restructuring program sugar mill

2025

- Increase the human resource capacity to support industrial machinery equipment
- Increasing the ability of industrial machinery equipment to fulfill the needs of machinery equipment
- Increasing the new investment / business expansion and spread of common equipment machinery industries in Java and outside Java
- Increasing the ability of industrial machinery equipment to produce capital goods



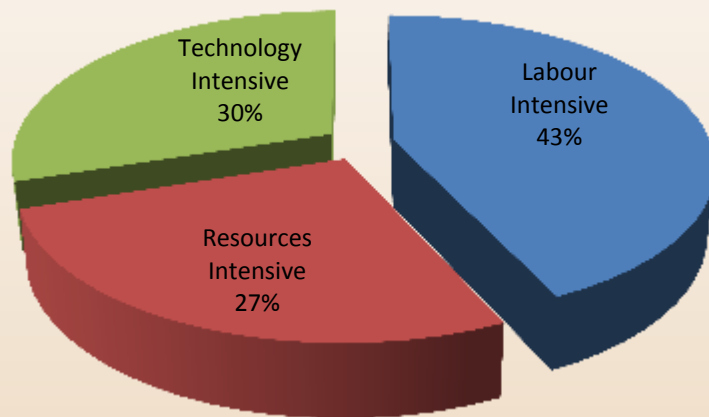
AREA OF COOPERATION :

- Joint Investment of Textile and Sugar Machinery Industry to support restructuring program for Textile and Sugar Industry (Modernizing production Facility).
- Joint Investment and/or joint operation to build Power Plant to support 10.000 MW second stage program.
- Joint Investment to develop supporting Industry (Machinery) for Energy Sector
- Joint Investment to develop Medical Device (Disposal product)

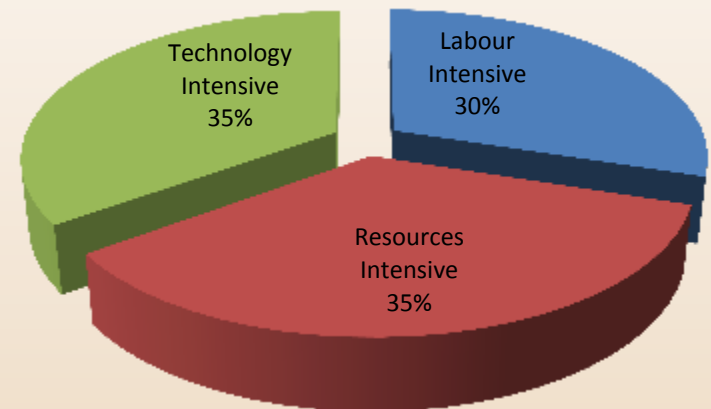
“.....industry structure is pushed to resources intensive industry and technology intensive industry



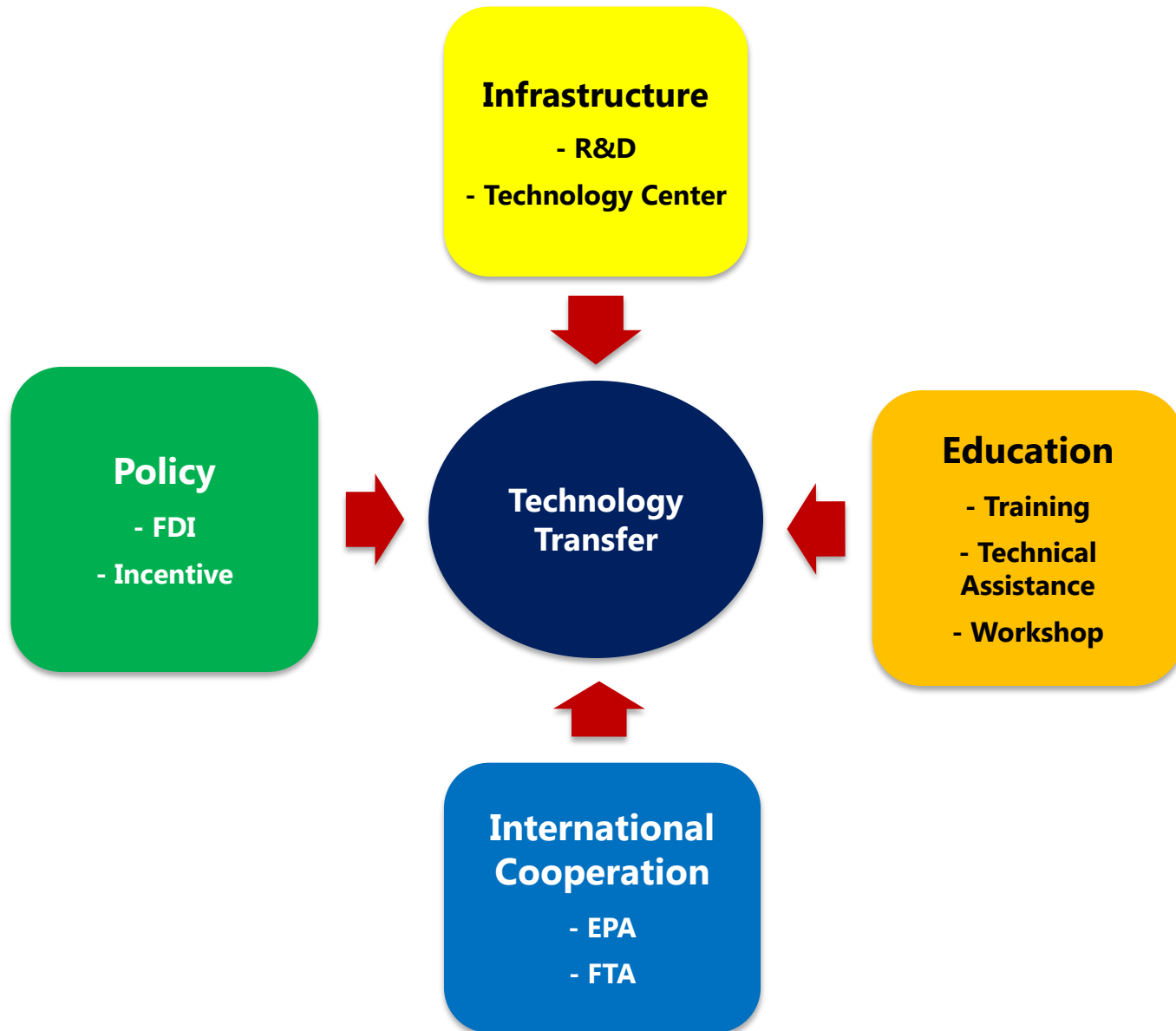
Industry Structure 2010



Industry Structure 2025



Supporting program to a technology intensive industry



INFRASTRUCTURE - R & D -Technology Center

- Development of Technology Infrastructure Capability (by building R&D Center) is one of most important instrument to create higher competitiveness
- Supporting of Technology Infrastructure:
 - Raw material development
 - Design Development
 - Product Development
 - Tools and Production Process Development
 - Pengembangan sistem
 - Environment Technology Development

INFRASTRUCTURE - R & D -Technology Center

- Agency for the Assessment and Application of Technology (BPPT)

is a non-departmental government agency under the coordination of the Ministry of Research and Technology, which has the tasks of carrying out government duties in the field of assessment and application of technology

VISION

Technology center of excellence that prioritizes the Partnership through maximum utilization of technology and engineering outputs.

MISSION

1. To push ahead of technology engineering for improving the competitiveness of industrial products.
2. To push ahead of technology engineering for improving public services of government agencies.
3. To push ahead of technology engineering for nation independence

website : <http://kip.bppt.go.id>

INFRASTRUCTURE - R & D -Technology Center

- Technology Assessment and Intellectual Property Right Center
Agency of Assessment of Policy, The Climate, and Industry Quality
Ministry of Industry

VISION

Operational institution as a working partner to develop industry technology

MISSION

1. To support research and development of technology as technical unit, certification, calibration, and testing to industry society
2. To support a useful technology as a added value and
3. To support quality of human resources in doing research

<http://bpkimi.kemenperin.go.id>

EDUCATION – Technical Assistance - Training - Workshop-

For Instances:

- Technical Assistance for Lean Production System in Automotive Component
- Training for Indonesian Expert in Continuous Improvement in Japan
- Workshop on Air Quality and Road Noise
- Training on Electric Welding

INTERNATIONAL COOPERATION – EPA – FTA – REGIONAL

For Instances

- Technical Assistance in Automotive Sector (IJEPA)
- Technical Assistance for Small Medium Enterprises (APEC)

WEB PORTAL Development

- Most of Government Institutions has a web portal. Mostly in Bahasa Indonesia and English
- Most of Industry Association has a web portal as well which is very helpful to get related information
- Generally inform the profile, vision, mission, regulation, organizational structure, current activities, etc
For instance:
Ministry of Industry web portal, consists of:
 - Profile
 - Statistics
 - Regulations
 - Publications
 - Public Information
 - Public Services
 - Several Important Links
- Still working on a comprehensive web portal
 - Put more information including the list of companies profile

THANK YOU