



Indonesia Solid Waste Association

# **CRITICAL NEED OF GREENING SME's In Post Rio +20 Scenario**



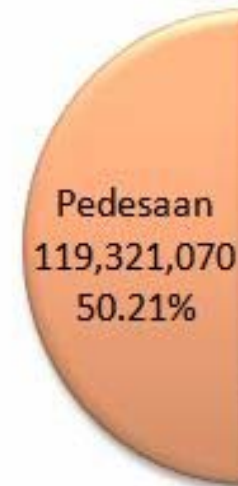
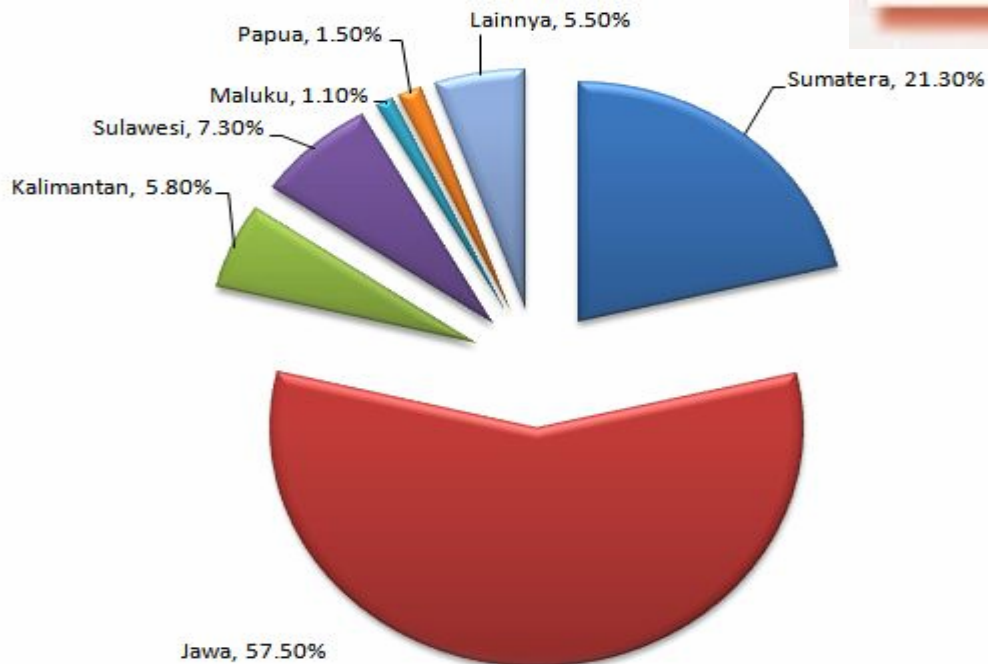
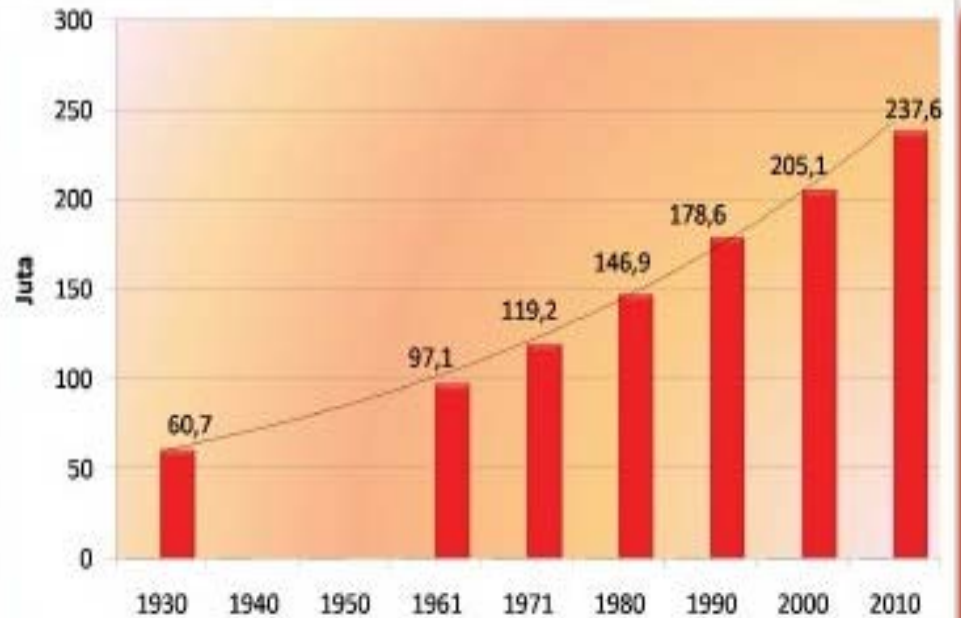
Presented by

**MOHAMMAD HELMY**

Indonesia Solid Waste Association

Email : [InSWA.org@gmail.com](mailto:InSWA.org@gmail.com)

# Population, 2010



RURAL



URBAN

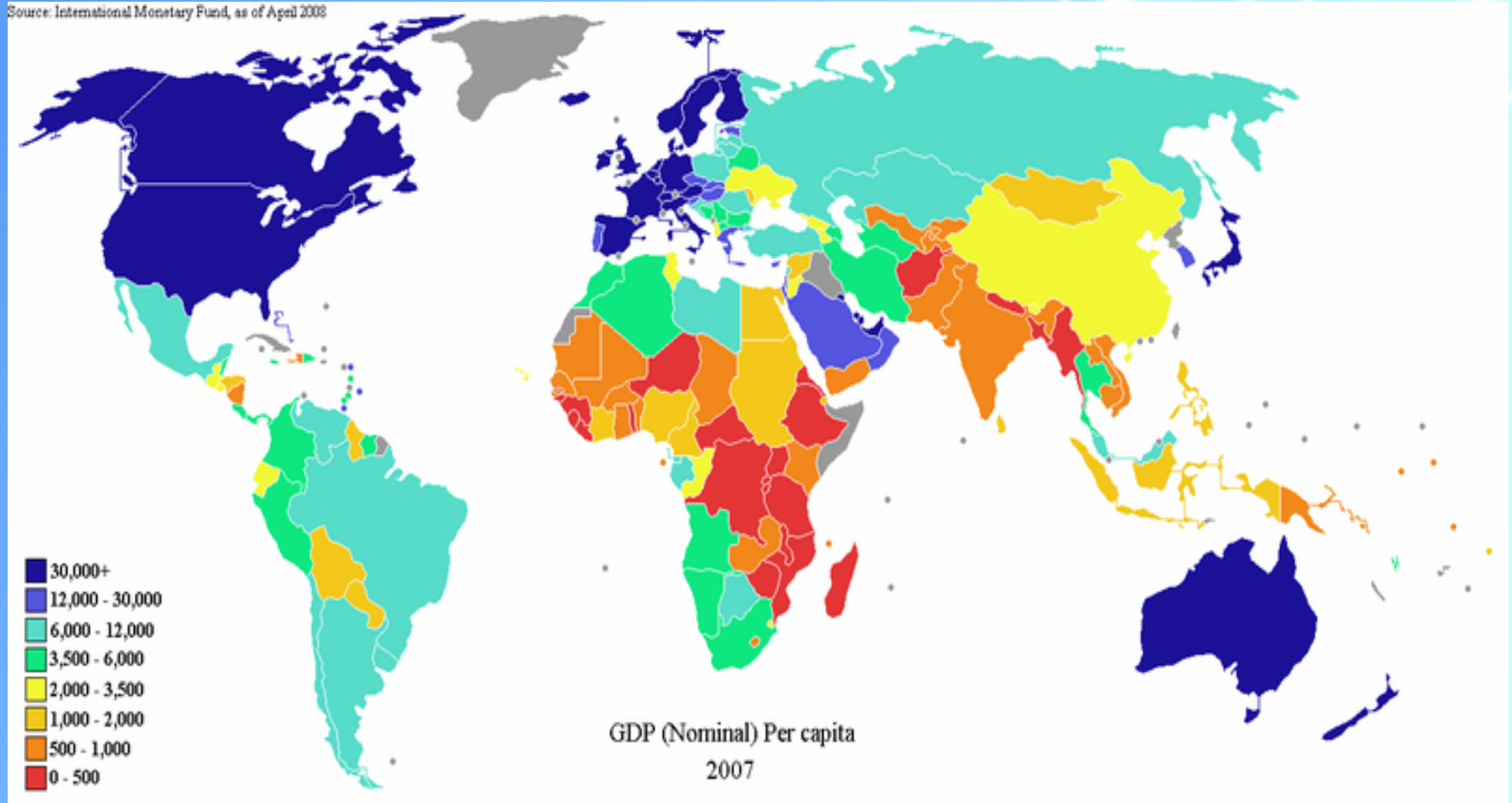
# Population Density by Province, 2010



**Indonesia : 33 provinces, 96 cities and 398 district  
Priority area 14 province**

# GDP PER CAPITA, 2007

Source: International Monetary Fund, as of April 2008



IMF 2009, GDP/Cap Indonesia : US\$ 2,240,-  
MSW / Cap / Day = 0.7 – 0.8 Kg



# ASEAN at a glance



Characteristics	Facts
Population	<ul style="list-style-type: none"> <li>about <b>580 million people</b> (2008)</li> <li>projected population : <b>650 million people</b> in 2020</li> </ul>
Population density	<b>130 people per square kilometer</b> (world average: 49 people per sq km)
Population in urban areas	<b>44% of region's total population;</b> projected to increase to 55% by 2020
Coastlines	<b>173,000 km</b> (14% of the world total)
Forest cover	<b>1,904,593 sq km</b> (2007)
Mangrove	<b>Over 52,000 sq km</b>
Peatland	<b>25 million hectares</b> (60% of global tropical peatlands)
Coral reefs	<b>34% of the world total</b>
Poverty incidence (% of population living below respective national poverty line)	<i>Cambodia (34.7%), Indonesia (16.6%), Lao PDR (32.7%), Malaysia (3.6%), Myanmar (26.6%), the Philippines (30.0%), Thailand (8.48%), Viet Nam (14.75%)</i>

# Positive Contribution

- Based on Report of Statistic Centre Bureau in 2007, Total population of SMEs is 49,8 million units or about 99,99 % out of the total of business units in Indonesia
- Contribute to the employment absorption about 97.3%
- SMEs contribute to the National PDB as big as 53,6 %.

# Negative Contribution

Due to limited of capital, weakness in management skill and knowlege, SMEs contributes to environmental pollution on the local as well as global scale

# LEGISLATIONS

- The Law No. 32 Year 2009 concerning Protection and Environmental Management
- The Law No 18 Year 2008 concerning Municipal Solid Waste Management
- The Law No. 20 Year 2008 concerning Small and Medium Enterprises (SME's)



# Pollution Control Strategy for SME's activities

1. To increase production efficiency in order **to save** the use of material, energy, and water as well as minimize the waste generated.
2. **To utilize** the waste generated in reducing environmental pollution load and creating economically added value.



# Strategic Plan in 2007-2012

1. Develop needed guidance related to implementation of pollution load reduction , resource efficiency and cleaner production application for several type of SMEs (i.e. tofu, cassava flour, leather, metal, textile / batik, small scale livestock)
2. Capacity building of local government and SMEs through training, technical and finalcial assistance and development of demonstration project
3. Conduct studies and facilitation related to the implementation of eco-industrial cluster for SMEs

# POLICY INITIATIVES TO PROMOTE 3R and RE

## Indonesia's experiences



- Non Monetary Incentive Initiatives;
- Monetary Incentive Schemes
- Other incentives

# Non Monetary Incentive Initiatives

(recognition, publication, technical facilitation, etc)

- **ADIPURA** (a Clean and Green Cities award programme)
- **KALPATARU** award program (for individual/group/company for their dedication to the environmental management practices)
- **INDONESIA ECOLABEL SCHEME**



- **PROPER** (Business Environmental Performance Rating)
- **3R** and **ICPC** (Indonesian Cleaner Production Centre)
- **ECO-INDUSTRIAL ESTATE**, etc



# Monetary Incentive Schemes

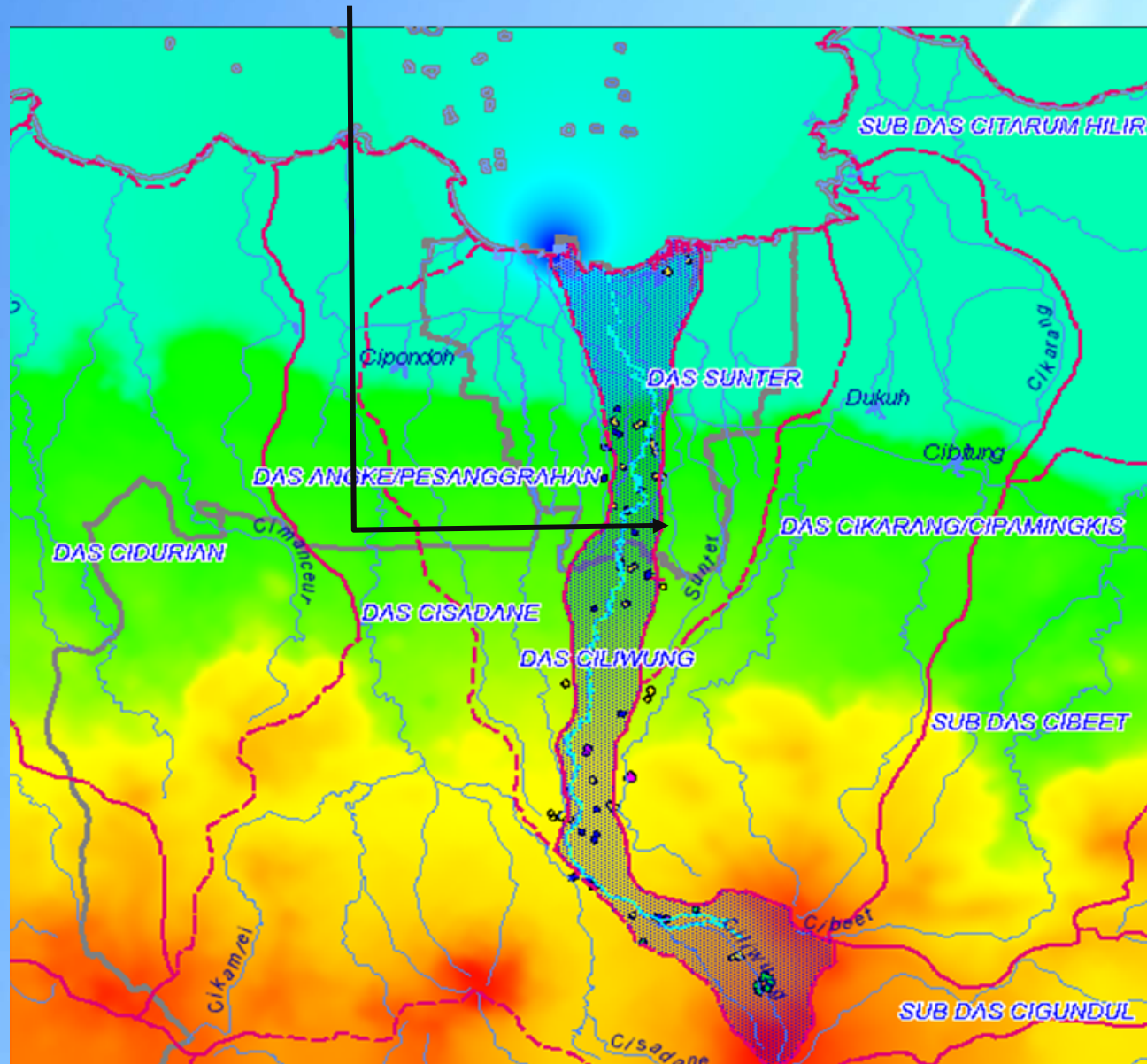
To enhance environmental quality in Indonesia through providing financial assistance to companies, esp. MSMEs which have limited financial access to banks in order to be able invest in environmentally friendly technologies, while at the same time supporting the companies to be in better position in terms of product competitiveness.

- Environmental Soft Loan Programs
- Import Duty Exemption Schemes
- Subsidy/grant programs
- Special Allocated Fund for environmental management by Local Government
- Tax reduction (possible)
- Multilateral fund → GEF, ODS phase-out grant
- CDM, etc

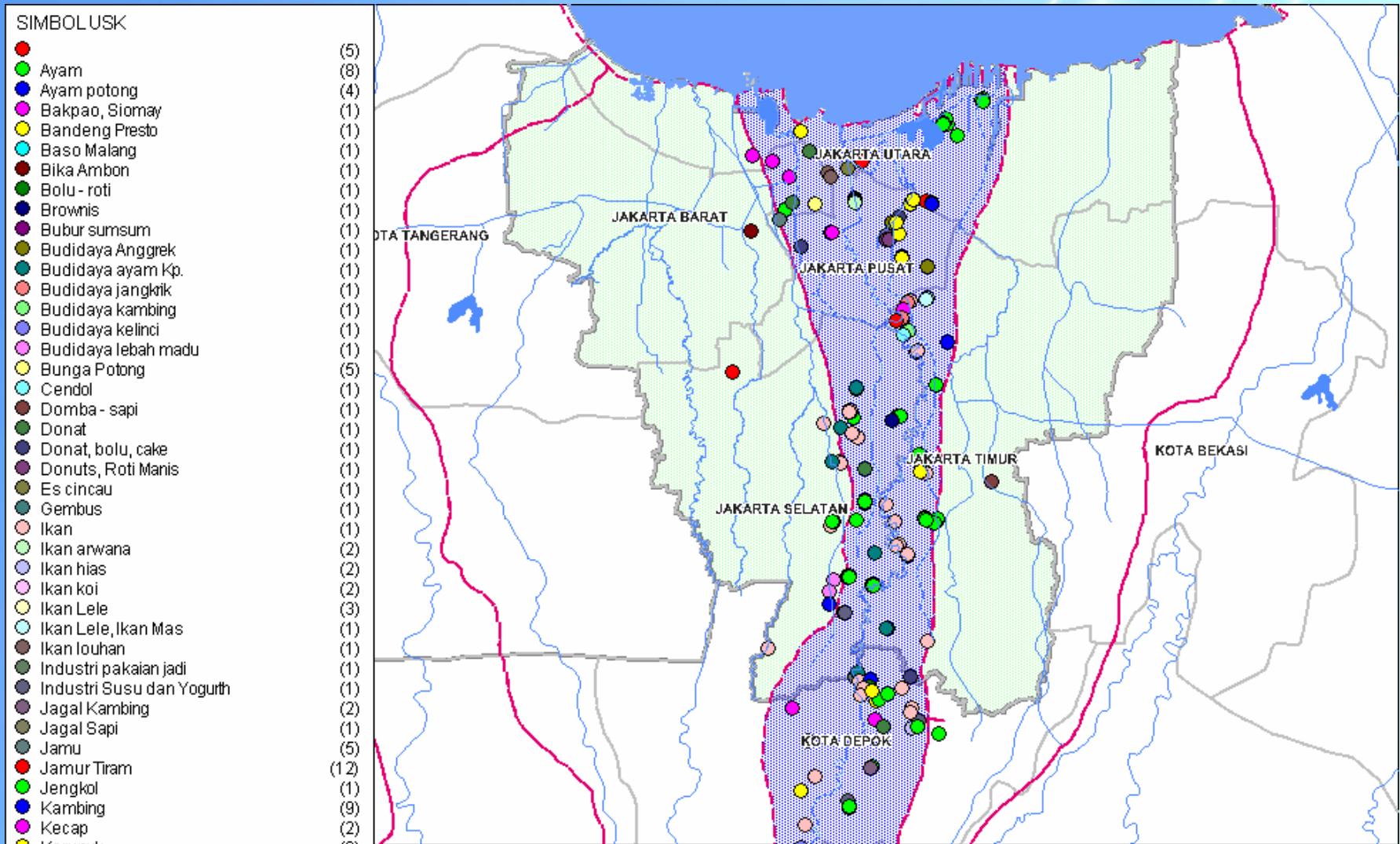
# Other incentives

- Collaboration with Indonesian central bank, to internalized environmental measurements into bank' policies
  - i.e. BI regulation no. 2/2005 and Circulate Letter of BI No. **SEBI No 7/3/DPNP** which includes inclusion of environmental performance within bank credit policy → i.e. create direct financial disincentive for PROPER' participating companies;
- GREEN PROCUREMENT
- GREEN BUILDING
- others

# SPATIAL MONITORING AND MODELING



# SME's SCATTERED along The River in JAKARTA





# Potentials Benefit from SME's Waste Utilization

Type of SMEs	Biogas (m <sup>3</sup> /year)	Economic value (US\$/year)	Pollution Load Reduction (ton/year)	Emission Reduction CO <sub>2</sub> (ton/year)
Tofu	34.8 millions	8.4 millions	102.080	0.8 millions
Livestock (cattle)	3 billions	742 millions	548.000	214.6 millions

# Indonesia Experience and Post Rio + 20 Scenario

- Indonesia experience is in accordance with Rio + 20 scenario : CP /3R and RE application to SME's;
- Reviewing and strengthening capacity to scaling up and focusing in priority sector and area;
- But it's still need special effort seriously in handling both municipal waste and SME's waste properly.

# The Needed of Technology

- Cost effective and small scale of emission and pollution reduction technology which is relatively low in investment, operational and maintenance cost
- Cost effective and small scale reuse and recycle-based technology
- Cost effective and small scale material, energy and water saving technology

# Thank you

[mohammadhelmy5@gmail.com](mailto:mohammadhelmy5@gmail.com)

[m\\_helmy59@yahoo.com](mailto:m_helmy59@yahoo.com)

+62 811 179 277

