



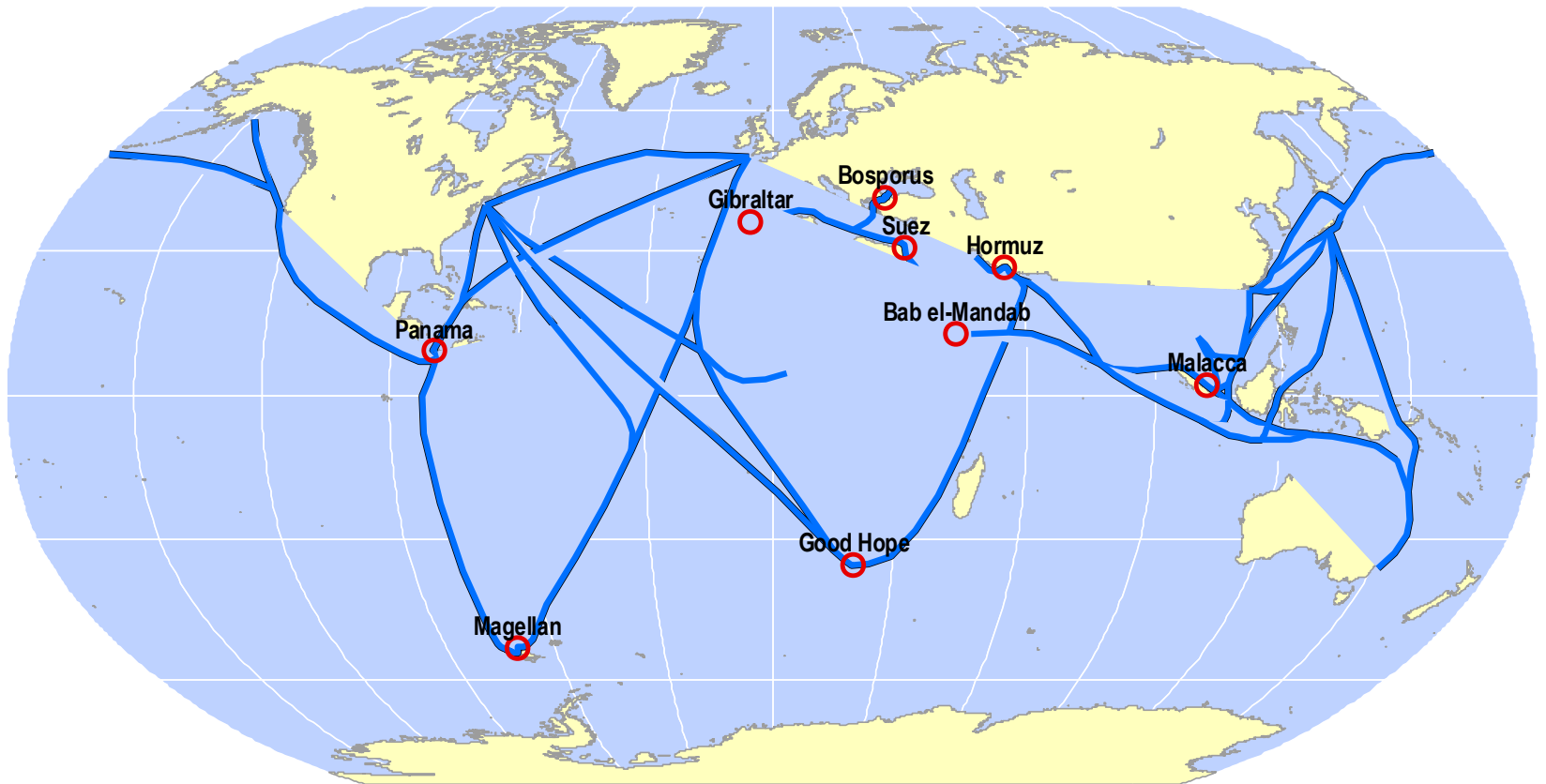
Indonesia Country Report: *PROGRESS on the Implementation of Environmentally Sustainable Transport in Indonesia*



The 7th Regional Environmentally Sustainable Transport (EST) Forum in Asia
Bali, 24 April 2013

Harry Boediartha
Ministry of Transportation
Republic of Indonesia

MARITIME ROUTES AND STRATEGIC LOCATIONS



SHIPPING AND STRATEGIC LANES PASSAGE ASIA PACIFIC

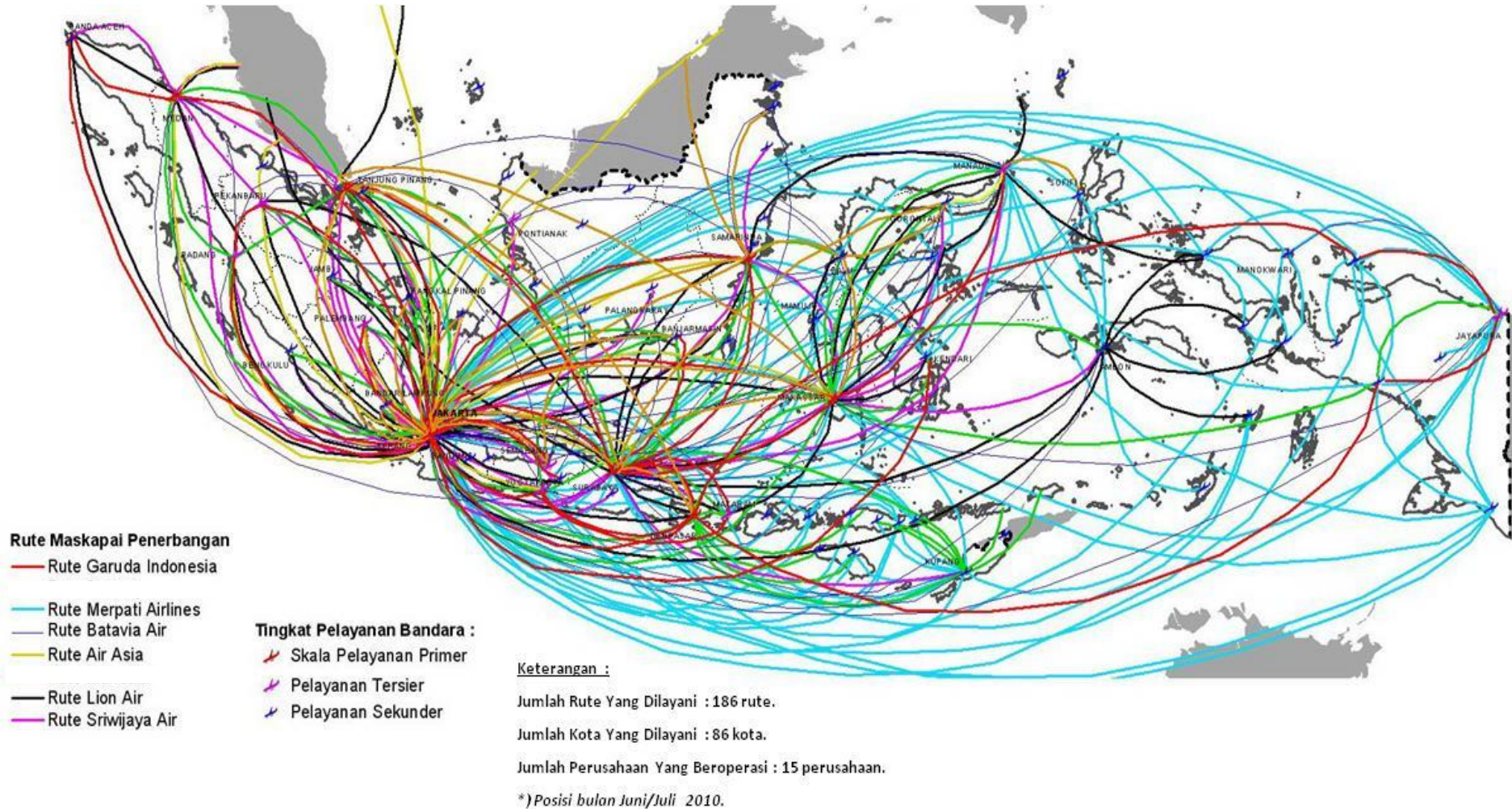


Equidistant Conic Projection

INDONESIAN ARCHIPELAGO SEA LANES

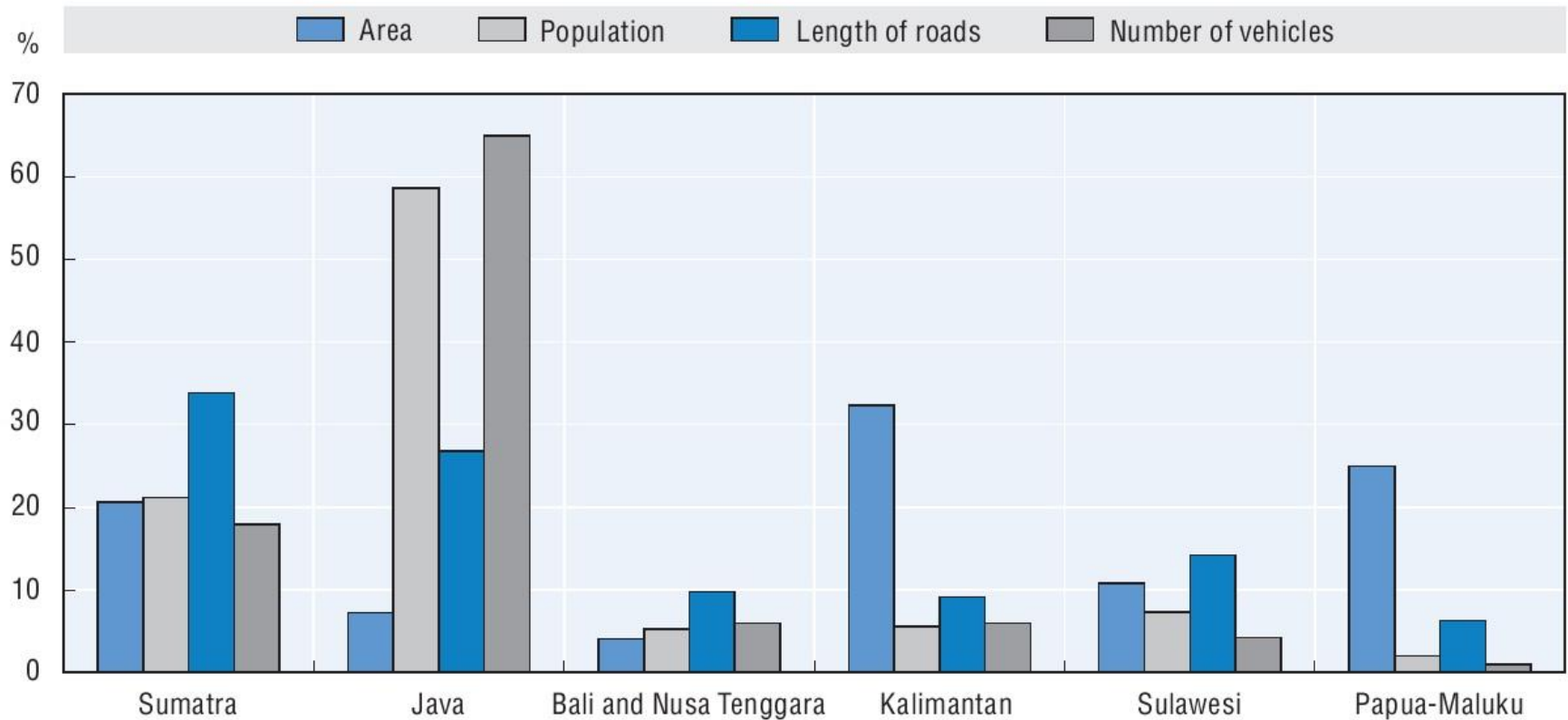


AIR TRANSPORTATION SYSTEM




Area, population, length of roads and number of vehicles in Indonesia, by region, 2011

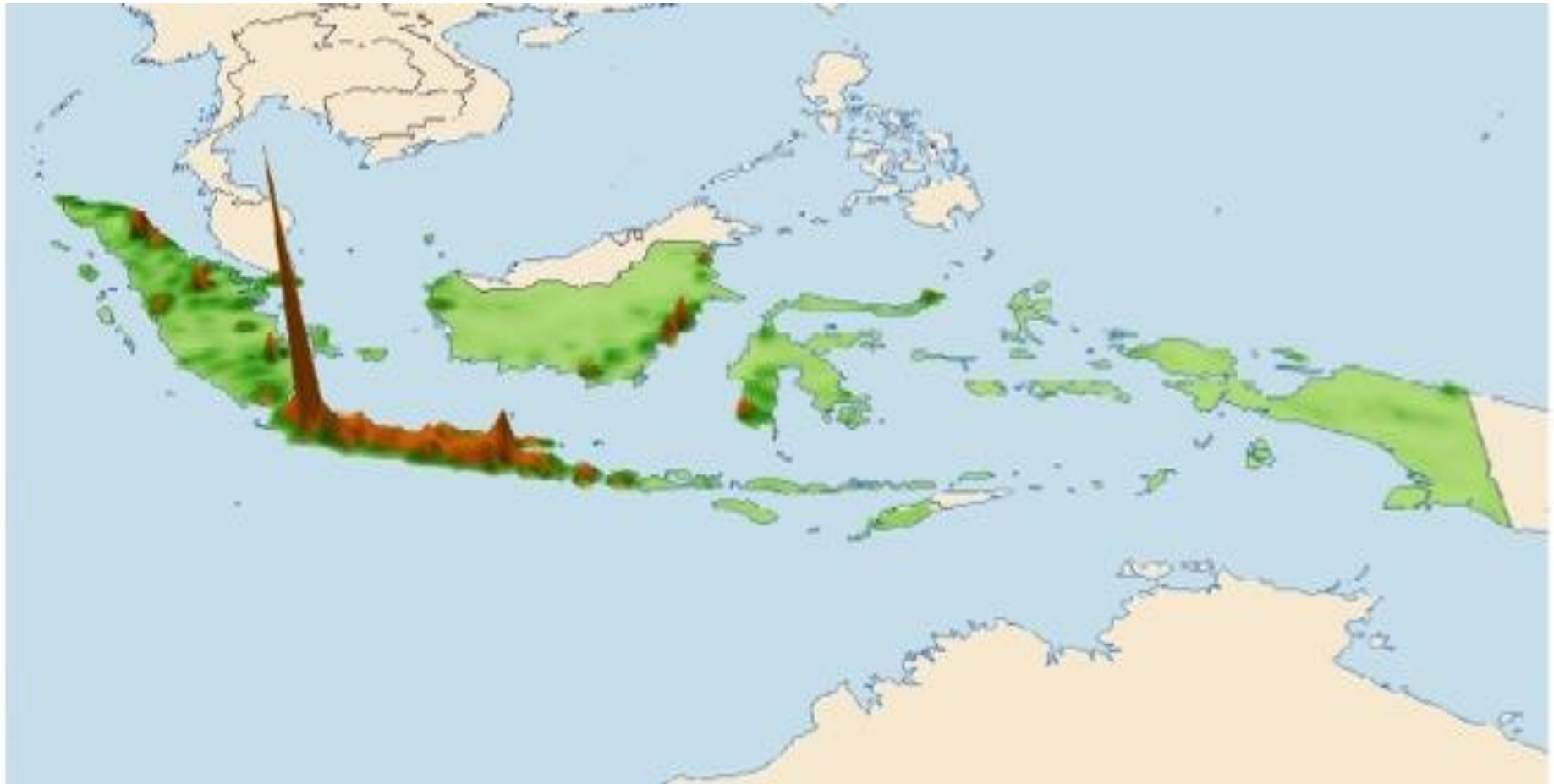
(percentage of total)



Source: Ministry of Transportation, Directorate of General Land Transportation, Land Transport in Figures 2011.

StatLink  <http://dx.doi.org/10.1787/888932774167>

INDONESIA ECONOMIC LANDSCAPE



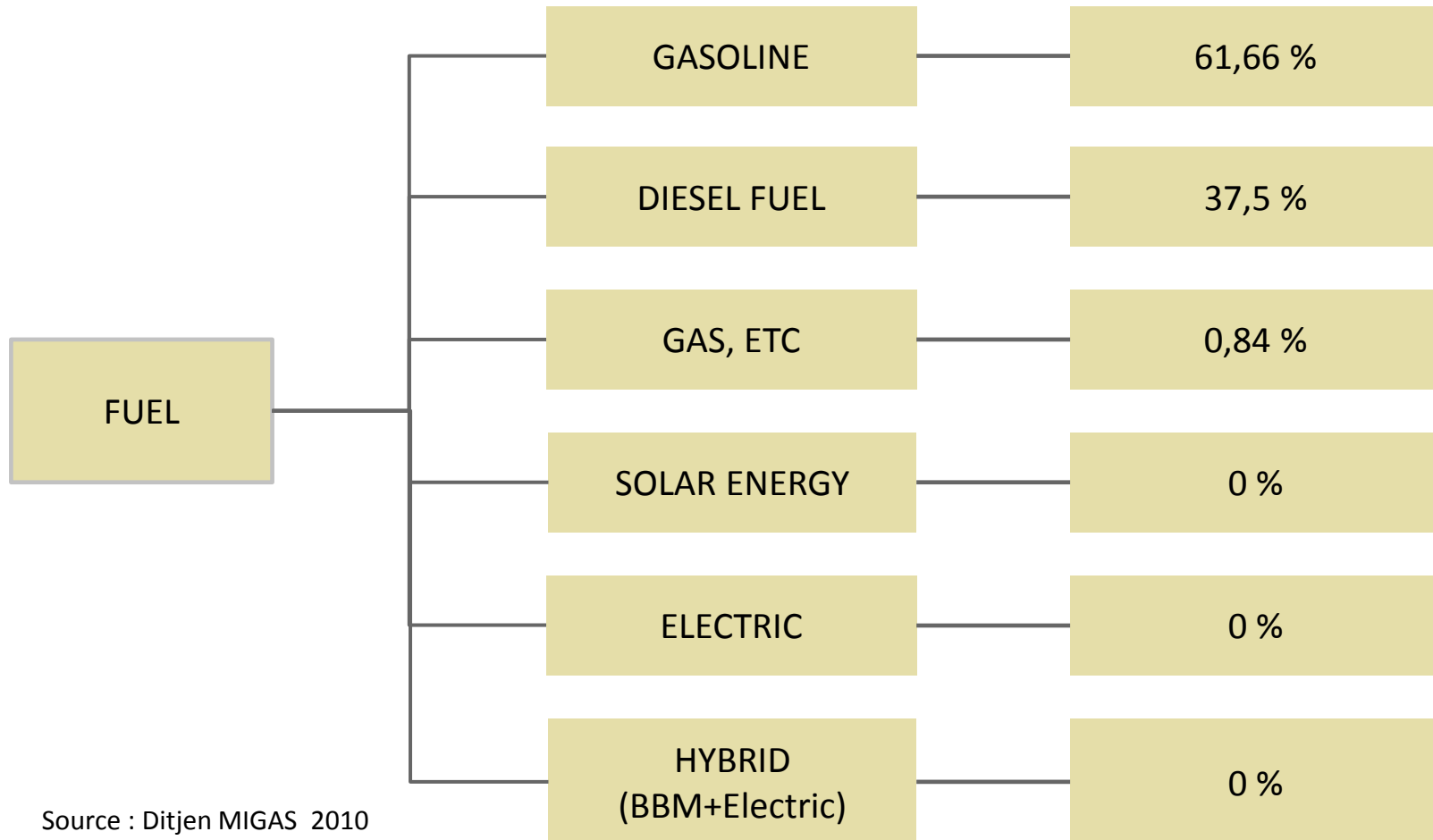
POPULATION IN MAIN AREAS IN INDONESIA IN 2010

No.	ISLAND	POPULATION		AREA	
		PEOPLE	%	Km ²	%
1	Sumatera	50.630.931	21,3	473.606	25,2
2	Jawa	136.610.590	57,5	138.794	6,8
3	Kalimantan	13.787.831	5,8	539.460	28,5
4	Sulawesi	17.371.782	7,3	189.216	9,6
5	Maluku	2.571.593	1,1	54.185	4,1
6	Papua	4.354.225	1,5	421.981	21,8
7	Bali dan Nusa Tenggara	16.574.796	5,5	66.52	5,8
Total Indonesia's area		237.641.326	-	1.910.931	-

Source: Statistical Data, 2010

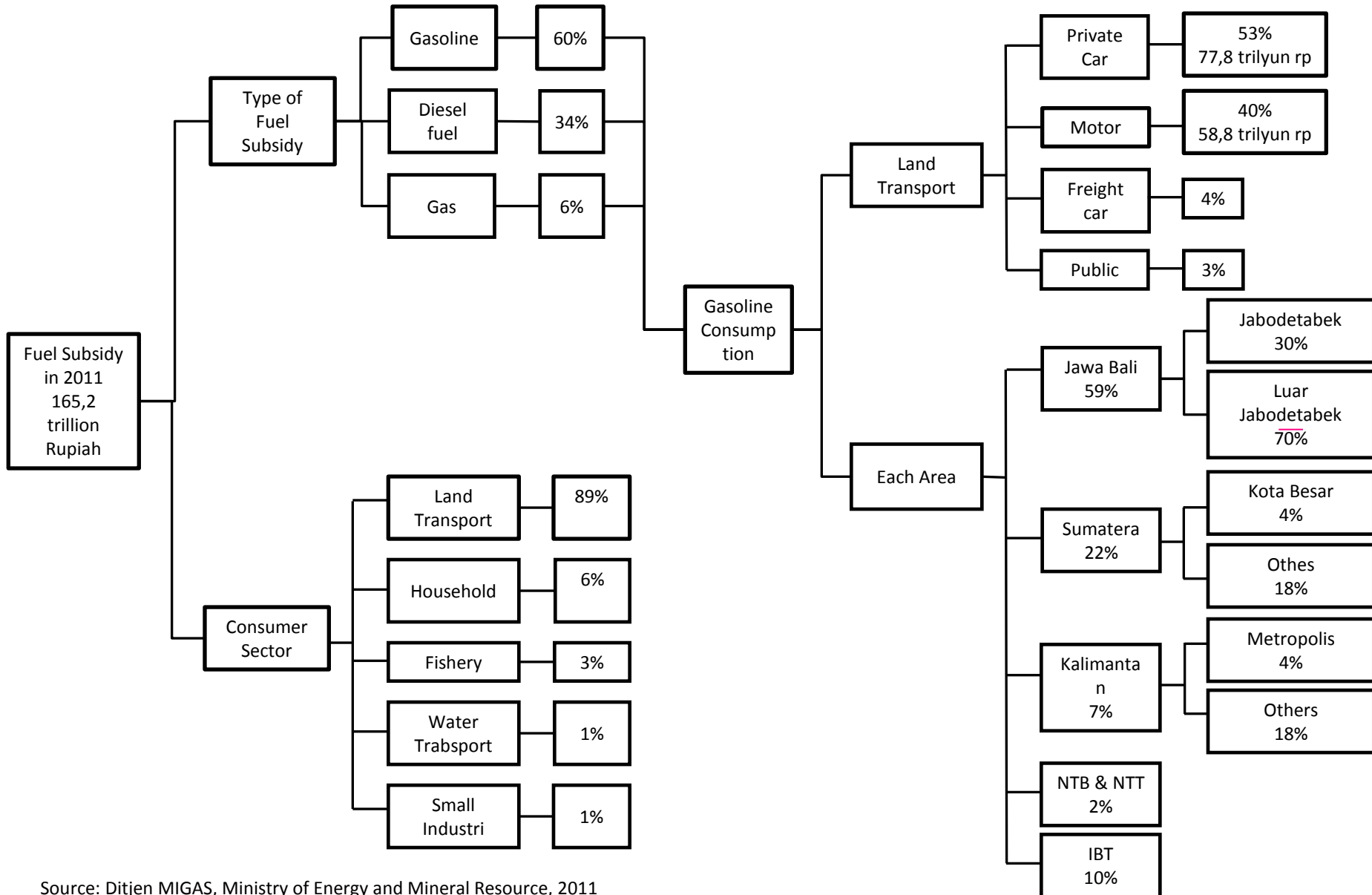
- Number of islands in Indonesia : 17.504 island
- Population Density in Indonesia : 1 people/Km²
- The most populated province is DKI Jakarta : 14.440 people/Km²
- The lowest population density is Papua : 8 people/Km²
- People living in urban areas : 118.320.256 people /49,8 %
- People living in rural areas : 119.321.070 people /50,2 %

PERCENTAGE OF ENERGY USE FOR TRANSPORT MODE



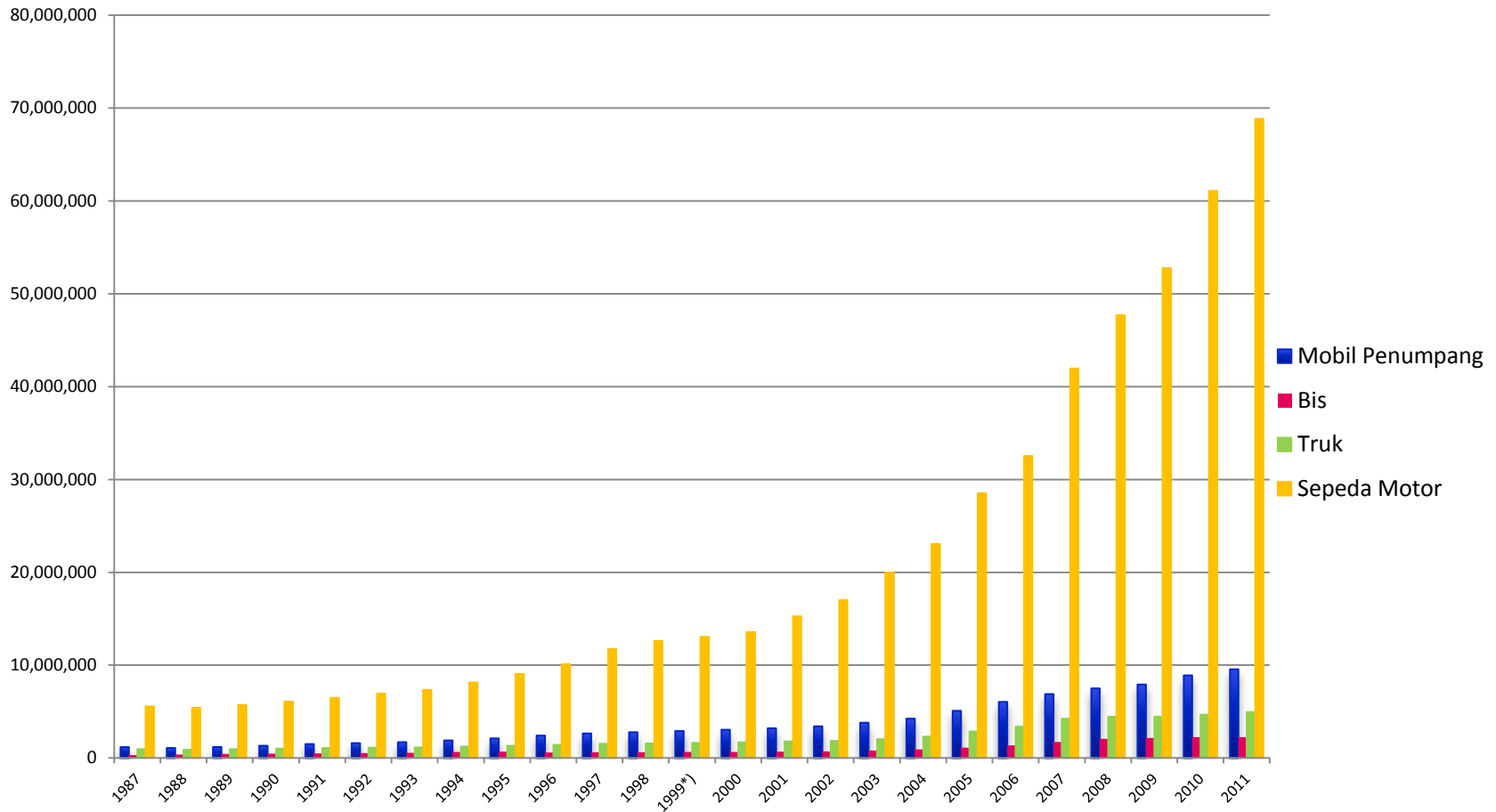
Source : Ditjen MIGAS 2010

OVERVIEW - USE OF FUEL SUBSIDY IN 2011



Source: Ditjen MIGAS, Ministry of Energy and Mineral Resource, 2011

GROWTH OF MOTOR VEHICLES BASED ON TYPE 1987-2011

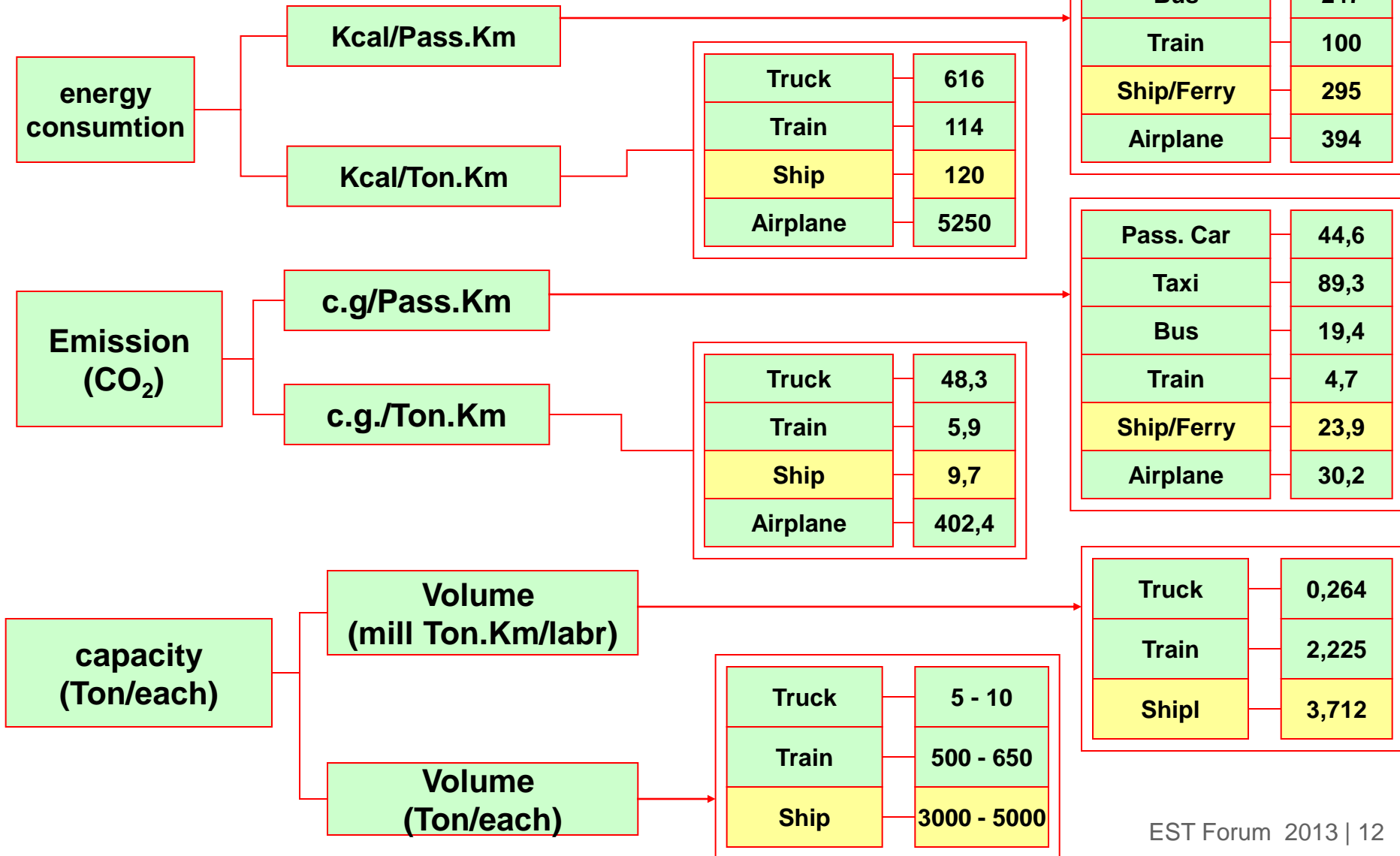


Source : Police Department Republik Indonesia

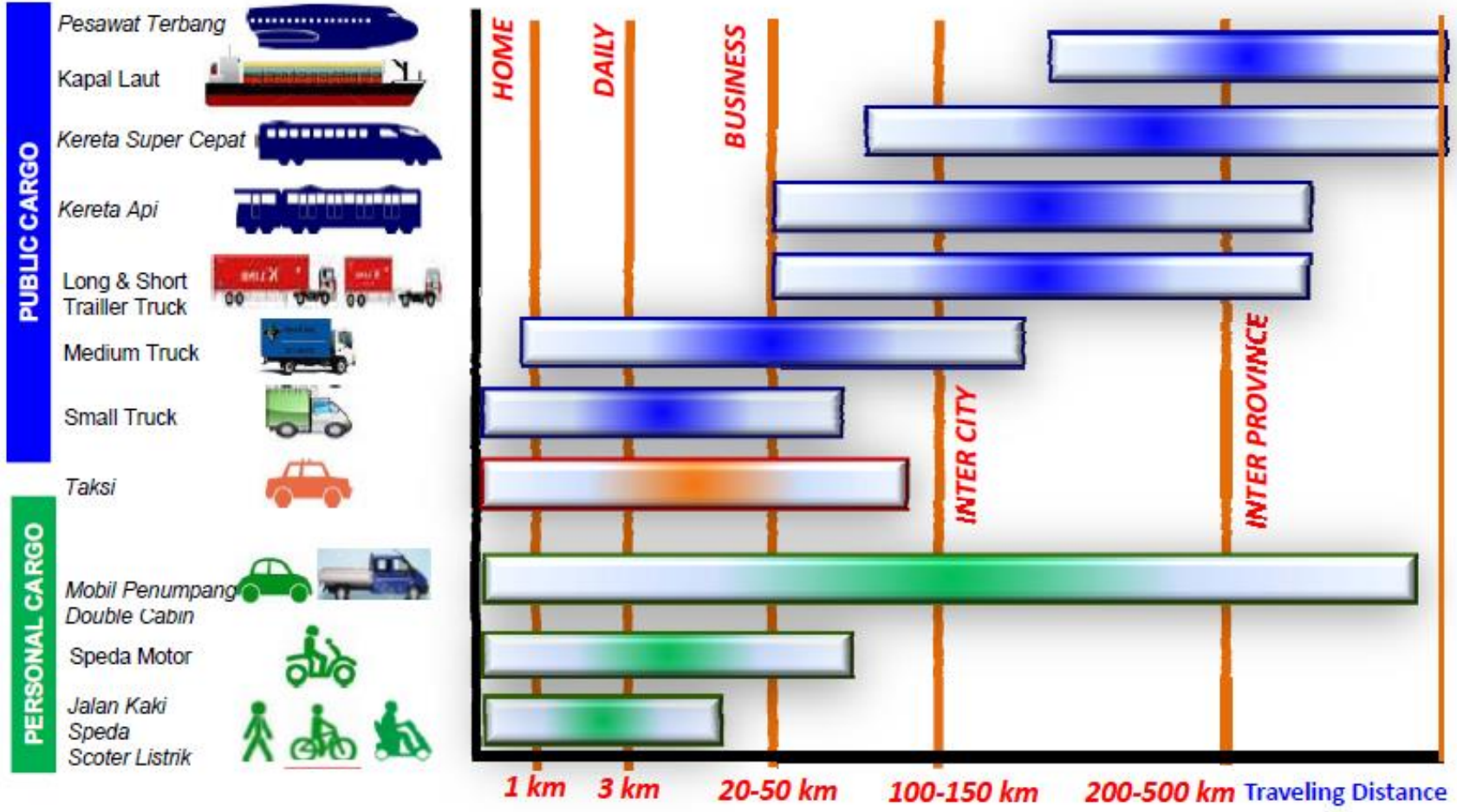
*) since 1999 not incl. Timor Leste

CHARACTERISTIC MODE OF TRANSPORT (SHIP, TRAIN, AIRPLANE, TRUCK)

SUMBER : JAPAN TRANSPORT ECONOMY RESEACH CENTER

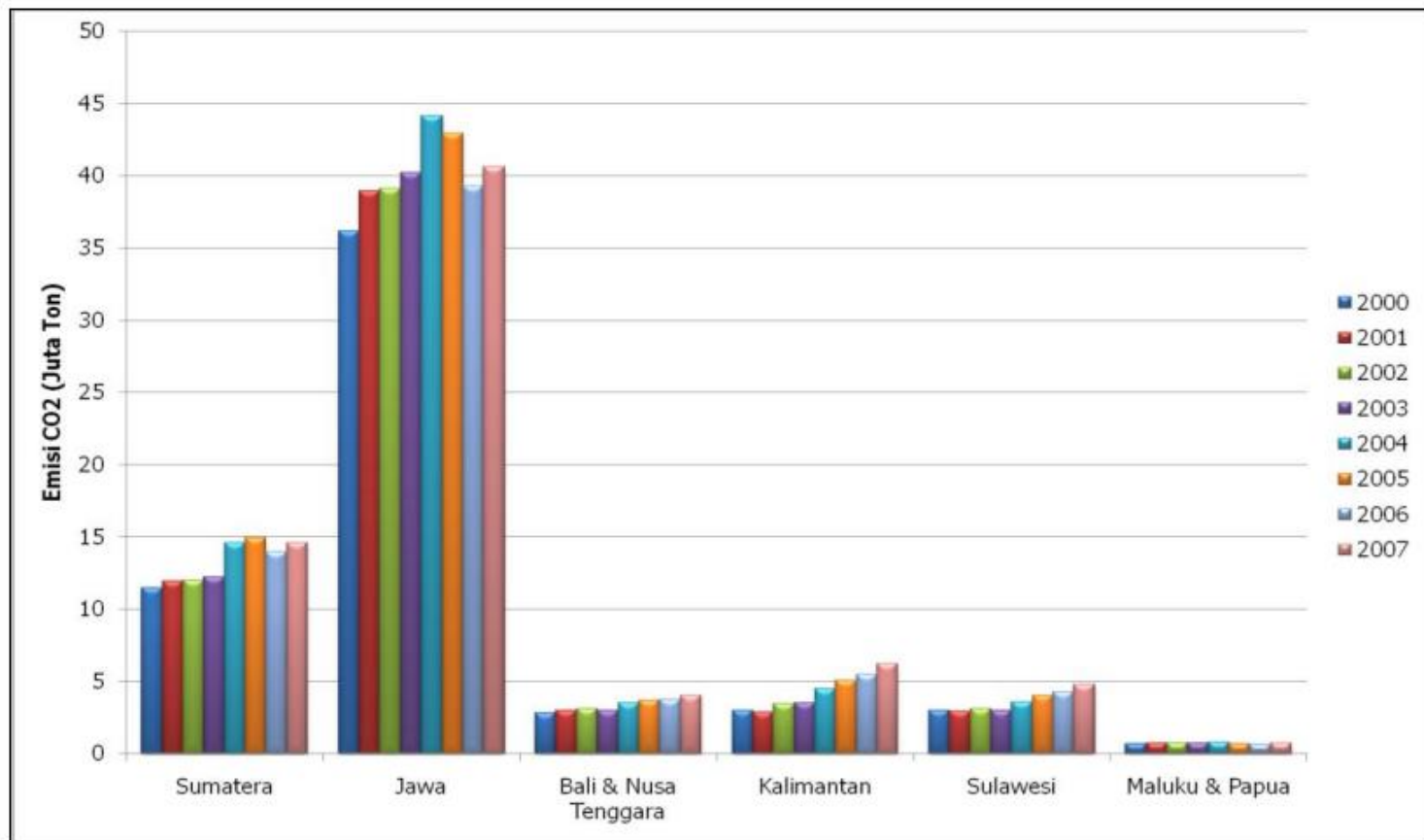


CHARATERISTIC MODE OF TRANSPORT



Source : Gaikindo, nd

EMISSION CO₂ (.000 TON) FROM VEHICLE PER EACH ISLANDS, 2000 - 2007

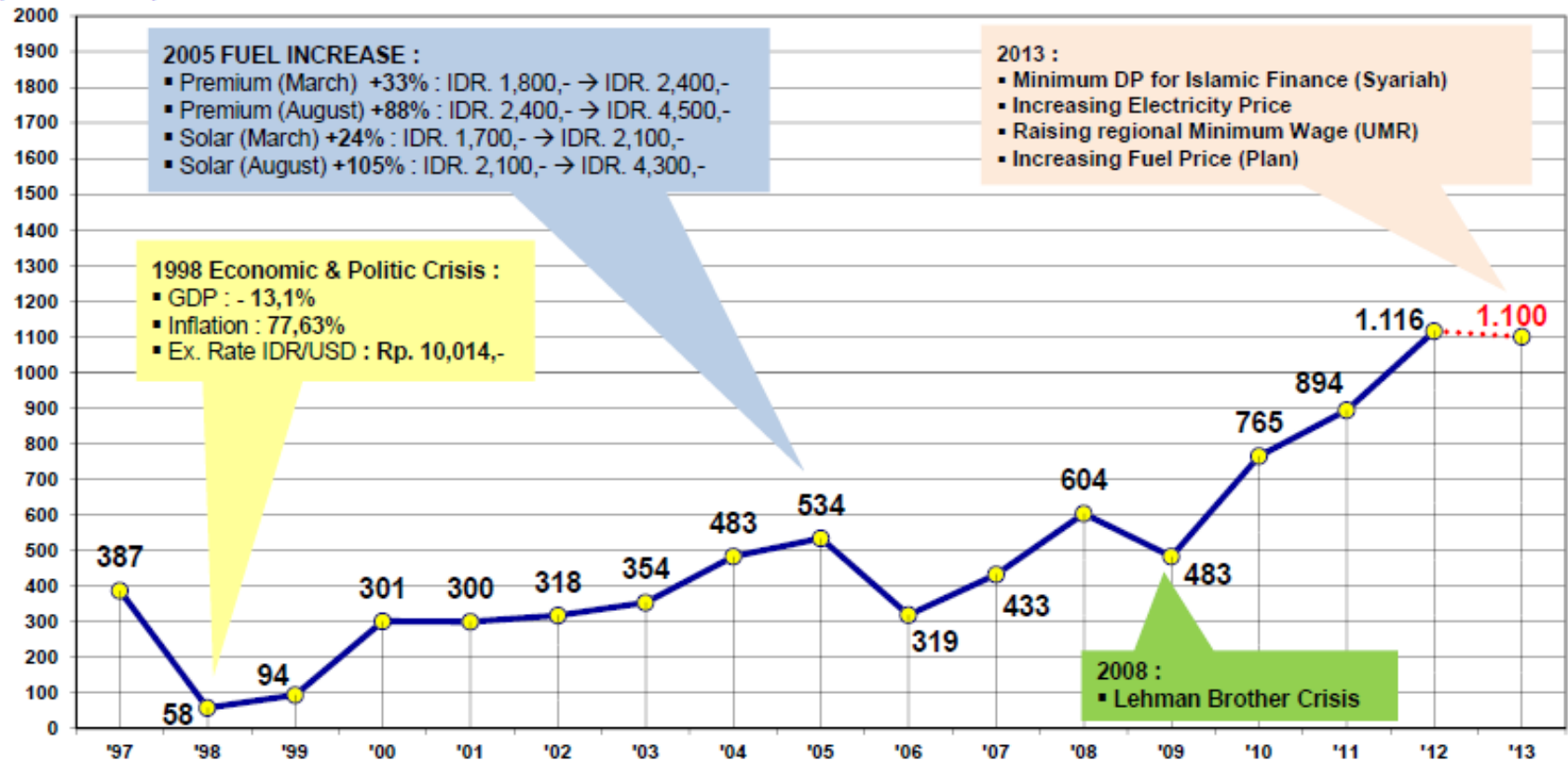


Source : Ministry of Environment, 2009

Based on average gasoline and diesel consumption and emission factor calculation

AUTOMOTIVE SELLING PROJECTION 2013

(1 X 1000 UNIT)

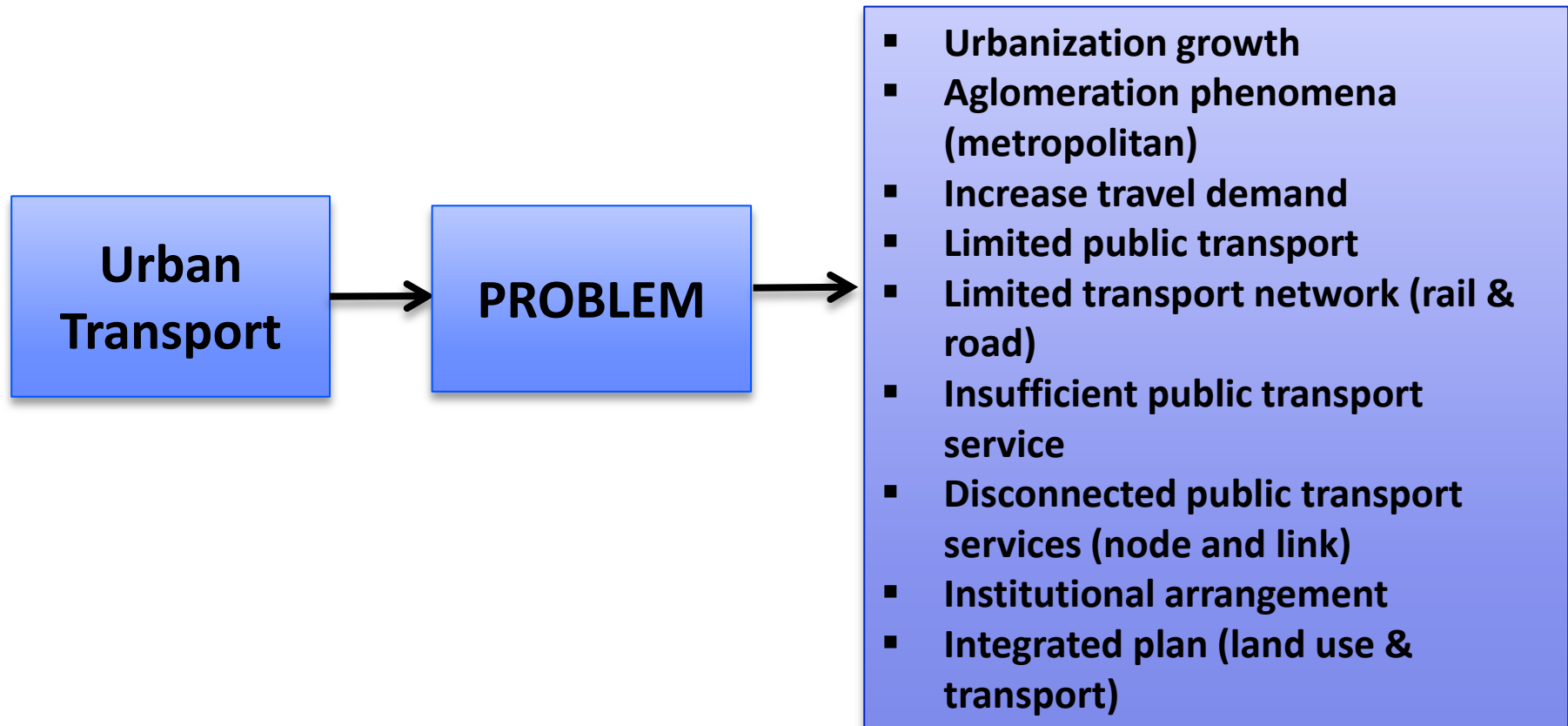


Note:

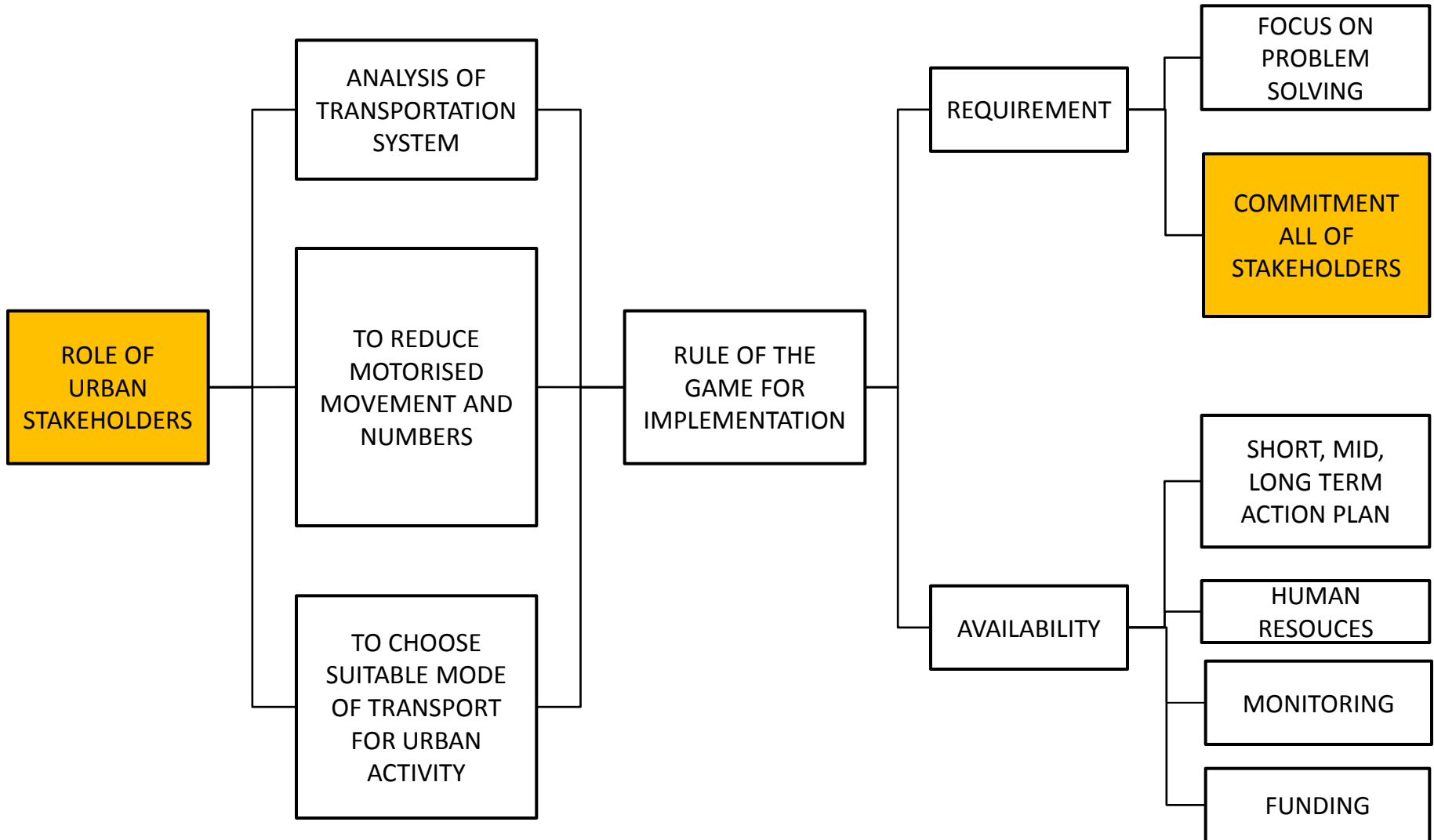
Domestic market growth assumptions in 2012 to 2013, 2013 to 2014, 2014 to 2015 = 10%

Source : Gaikindo, nd

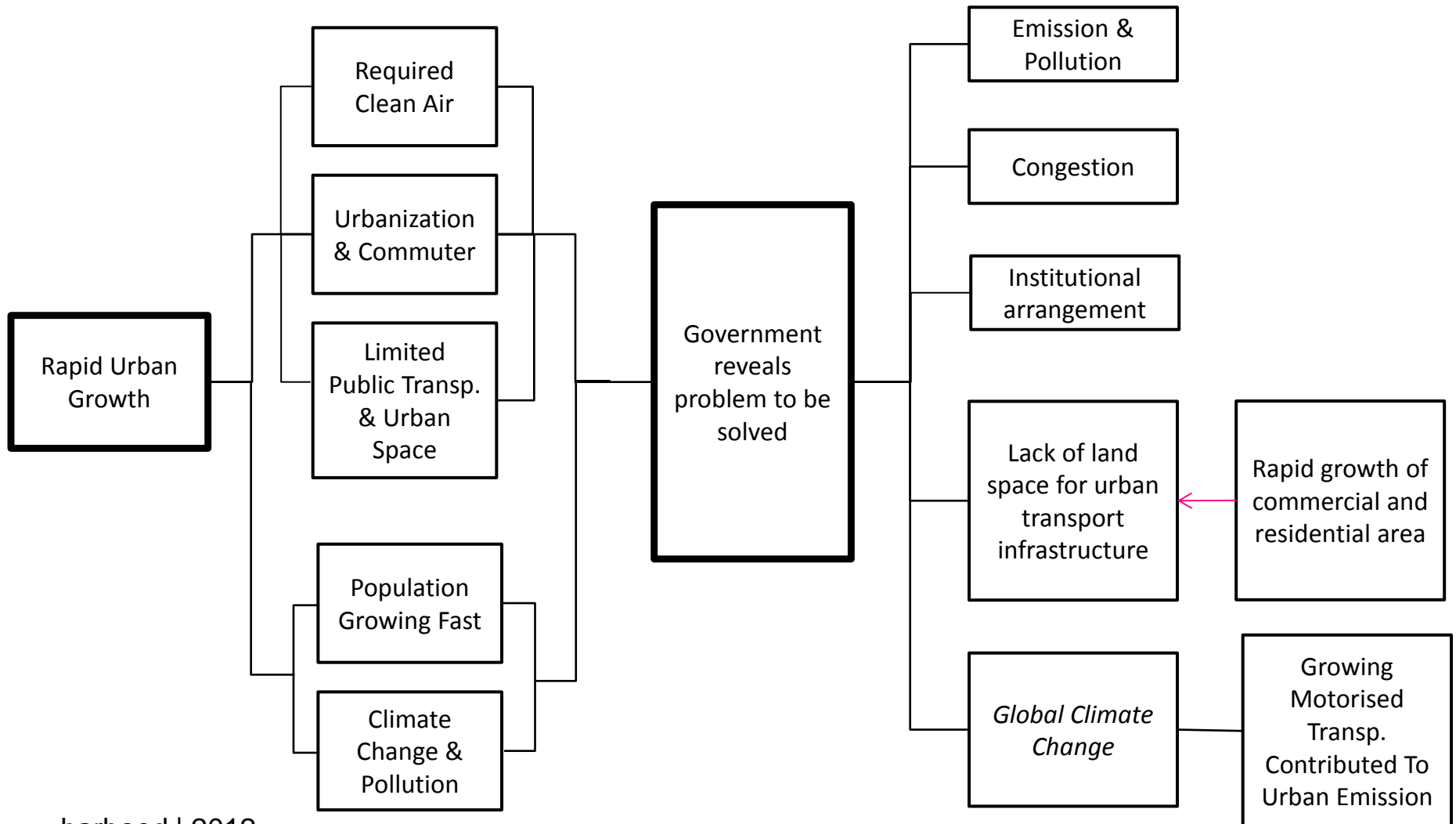
INDONESIA URBAN TRANSPORT PROBLEM



ACTION PLAN FOR EST



URBAN TRANSPORT CHALLENGE




Purpose of EST in Indonesia



Facilitating policy dialogue periodically through The Regional EST Forum as strategic platform and medium to exchange and share knowledge about the best practices, policy's instruments, technology tools, etc which related to EST aspects as affirmed in Aichi Statement

Giving help to the region to develop EST strategy based on situation, necessity, and particular region priority

Developing Substantial relation between Initiative EST Asia and the other relations continuously in regional and international area, to reach bigger synergy in various EST sections



Indonesia: GOI Commitment in Emission Reduction



Initiative from Indonesian President at G20 meeting in Pittsburgh, USA and Conference of Parties (COP) 15 in Copenhagen December 2009 that Indonesia will reduce emission GHG **26%** from Business as Usual and 41% if supported by international support by 2020.

The target 26% will be reached from three sectors i.e.

- Forestry = 14%
- Waste = 6%
- Energy = 6% (power plant, industry, transportation (2-3%), household)



GHG National Action Plan

National Action Plan on GHG Emission Reduction
(Presidential Regulation No. 61/2011)

Goals & Strategies From The Bangkok Declaration For 2020

Strategies to Shift towards more sustainable modes :

Goal 4 : Non-Motorized Transport (NMT)

Goal 5 : Improve public transport services

Goal 6 : Transportation Demand Management (TDM)

Goal 9 : Standards

Goal 10 : Inspection and maintenance (I/M)

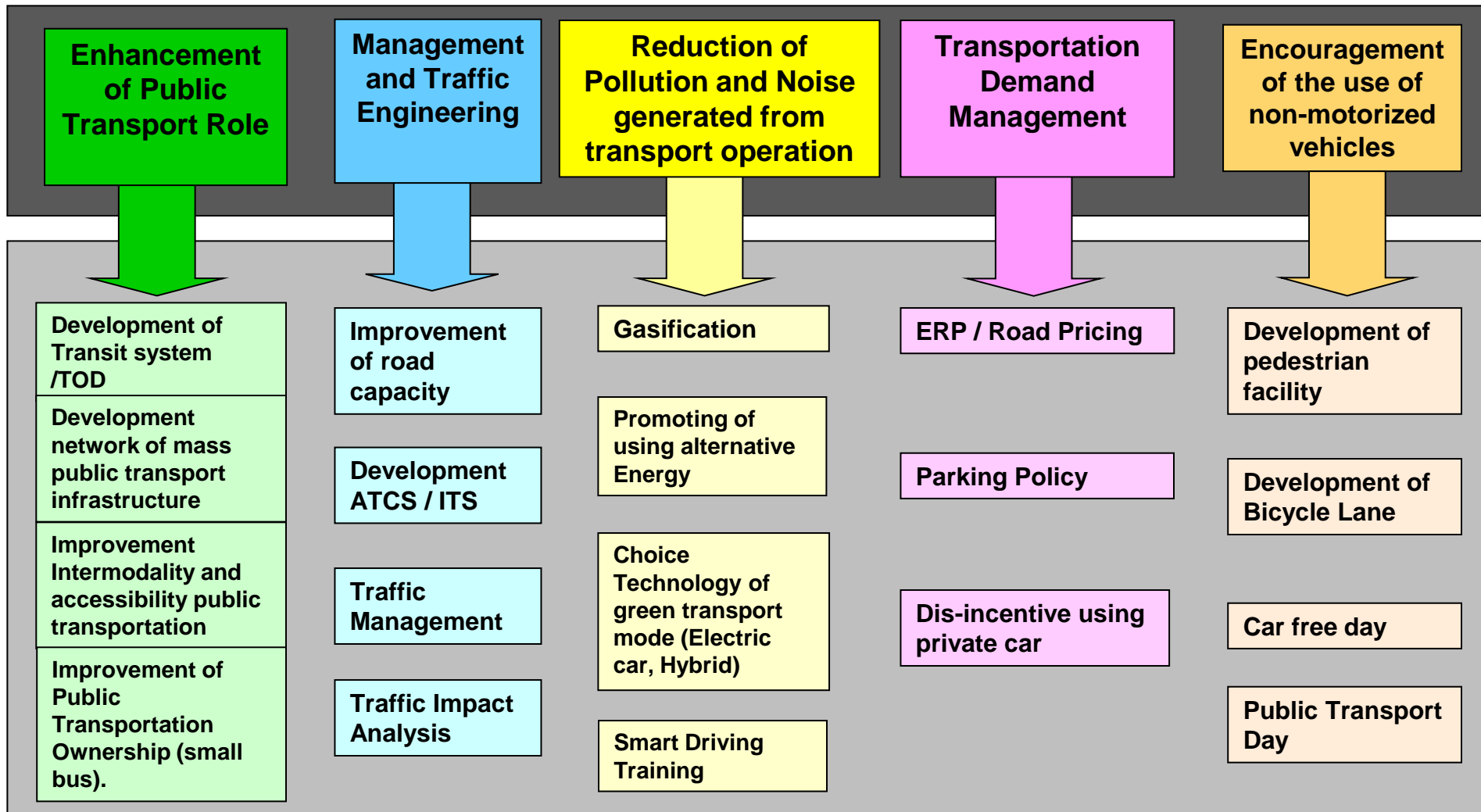
Goal 11 : Intelligent Transportation Systems (ITS)

Cross-cutting strategies :

Goal 15 : Non-Motorized Transport (NMT)

Goal 19 : Improve public transport services

Programs in Supporting Environmentally Sustainable Transport



**NATIONAL ACTION PLAN
FOR GREEN HOUSES
GASES IN
TRANSPORTATION
SECTOR**

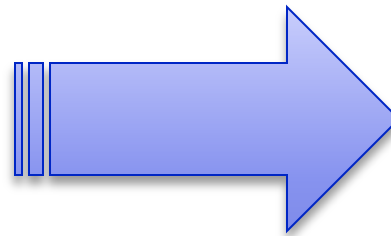
LAND TRANSPORT

SEA TRANSPORT

AIR TRANSPORT

RAIL TRANSPORT

**May be
potentially
proposed as
NAMAs**



NAMA

S

**Nationally
Appropriate
Mitigation Actins**



NAMAS IN INDONESIA

Bali Action Plan

“Nationally Appropriate Mitigation Actions (NAMAs) by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner”

- Bali Action Plan on COP13 in 2007
- Commitment of Indonesian Government on G20 meeting in Pittsburgh 2009 to reduce until 26% and additional 15% with international support until 41% on 2020
- Presidential Regulation of the Republic of Indonesia #61/2011 on the National Action Plan for Greenhouse Gas Emissions Reduction
- Presidential Regulation of the Republic of Indonesia 71/2011 on Green House Gas Inventory
- Pilot project on Supported Transport NAMA development supported by GIZ, registered to UNFCCC November 2012

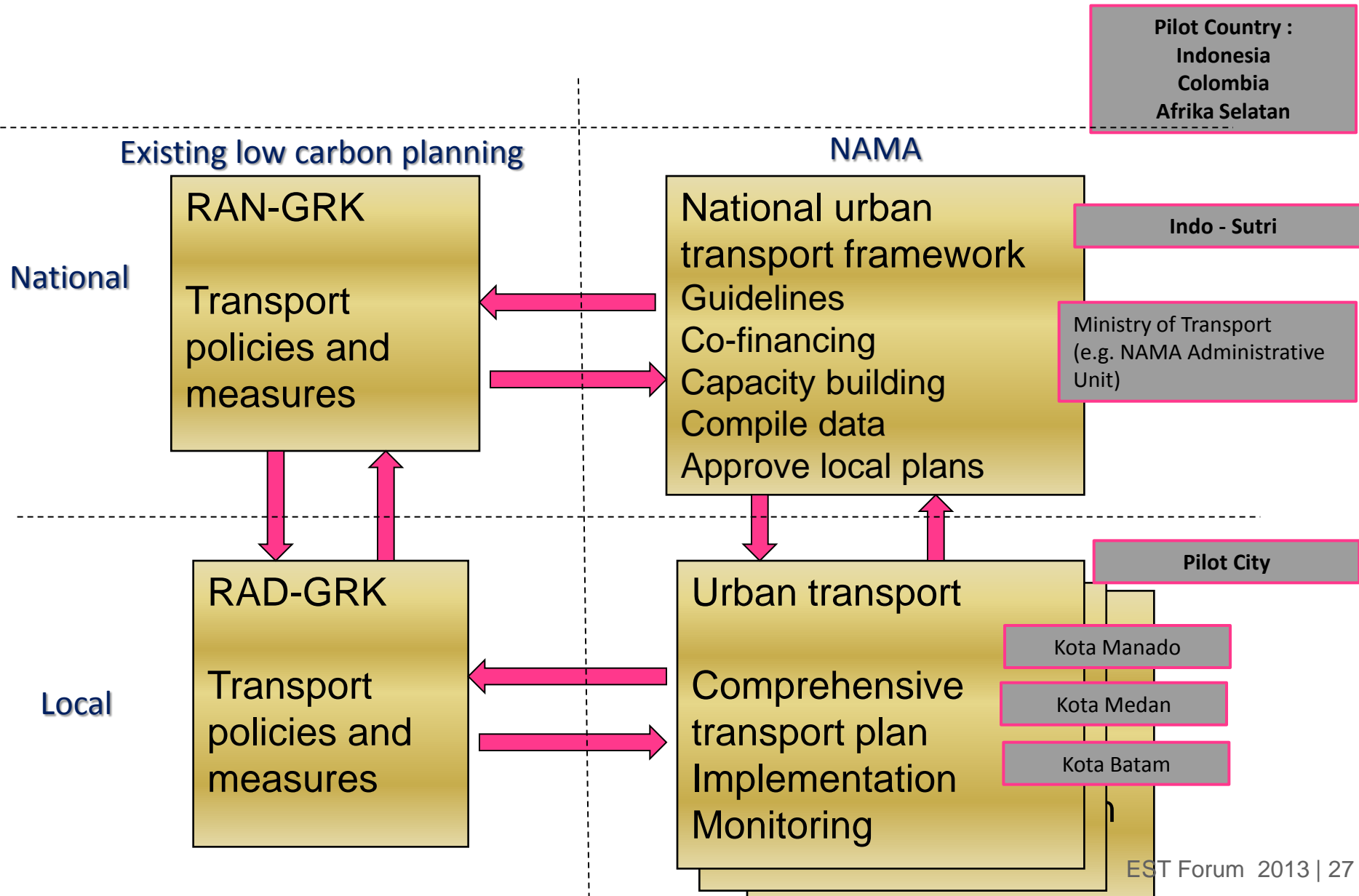
NATIONAL ACTION PLAN FOR GREENHOUSE GAS EMISSIONS REDUCTION

- Considered as Unilateral NAMA
- Cover land, railway, sea, and air transport
- Address mitigation actions, objective, period, location, estimated emission reduction, and responsible institution
- Up to 2012, focused on land and railway transport. Sea and Air transport mitigation actions are under development
- Emission reduction target from Land Transport **4.752** MtCO₂e
- Measures in land transport includes:
 - ITS development
 - Traffic Impact Control
 - Parking management
 - Congestion charging and road pricing
 - BRT or Semi-BRT reform
 - Public transport revitalizaion
 - Smart driving training
 - Non motorized transport development

PILOT PROJECT ON SUPPORTED NAMA

- Considered as Supported NAMA
- Registered as “Sustainable Urban Transport Initiative” on November 2012
- Promote sustainable urban transport in Indonesian Cities
- Activity covers implementation and monitoring measures
- The pilot phase is the implementation of low-carbon mobility plans in three cities (Medan, Manado, Batam) as well as supporting activities on national level
- Timeframe is 8 years started from 2013
- Estimated full cost of implementation **USD \$400-800 million**
- Estimated emission reduction **5 MtCO₂e**

CONCEPT OF REDUCING EMISSION (INDO SUTRI)



MoU Signing INDO SUTRI Pilot Project Between Ministry of Transportation and 3 Mayors and governors of Batam, Manado and Medan



NATIONAL IMPLEMENTATION ACTION FOR GREENHOUSE GAS EMISSION REDUCTION IN LAND TRANSPORTATION (RAN GRK)

NO.	ACTION PLAN	ACTIVITIES / OBJECTIVES	LOCATION
1	ITS development	ITS construction of as many as 13 packages for: <ul style="list-style-type: none"> • Traffic congestion reduces the level of coordination intersection • Improving coordination between intersections • Giving buses priority at intersections • Modal shifting from private vehicles to public transport 	Greater Jakarta: Jakarta, Bogor, Depok, Tangerang, Bekasi 12 City: Medan, Padang, Pekanbaru, Palembang, Bandung, Semarang, Yogyakarta, Surabaya, Denpasar, Makassar, Balikpapan and Banjarmasin
2	The application of Impact Management - Traffic (Traffic Impact Control / TIC)	The application of Impact Management - Lintas as many as 12 packets	12 City: Medan, Padang, Pekanbaru, Palembang, Bandung, Semarang, Yogyakarta, Surabaya, Denpasar, Makassar, Balikpapan and Banjarmasin
3	Parking Management Application	Implementation of parking management in 12 cities to: Mode reduces share in downtown Reduce the use of private vehicles	12 City: Medan, Padang, Pekanbaru, Palembang, Bandung, Semarang, Yogyakarta, Surabaya, Denpasar, Makassar, Balikpapan and Banjarmasin

NO	ACTION PLAN	ACTIVITIES / OBJECTIVES	LOCATION
4	Application of Congestion Charging and Road Pricing (combined with mass rapid public transport)	Application of Congestion Charging and Road Pricing in 2 cities to: Mode reduces transport movement in downtown Reduce congestion in the area of traffic restrictions	2 City: Jakarta and Surabaya
5	Reform-Bus Rapid Transit System Transit / semi BRT	Implementation of the procurement and distribution of as much as 45 BRT buses / year in 12 Cities	12 City: Medan, Padang, Pekanbaru, Palembang, Bandung, Semarang, Yogyakarta, Surabaya, Denpasar, Makassar, Balikpapan and Banjarmasin
6	Renewal of public transport	Implementation of appropriate public transport fleet upgrade the design of low-emission standards 6,000 units	12 City: Medan, Padang, Pekanbaru, Palembang, Bandung, Semarang, Yogyakarta, Surabaya, Denpasar, Makassar, Balikpapan and Banjarmasin
7	Converter Installation Kit (gasification public transport)	Converter kit installed in taxis and public transportation that uses gasoline to reduce CO2 emissions by up to 25% of 1,000 units / year	9 cities: Medan, Palembang, Greater Jakarta, Cilegon, Cirebon, Surabaya, Denpasar, Balikpapan and Sengkang
8	Training and socialization smart driving (eco-driving)	Implementation of smart driving training and socialization for 50,000 people / year	12 City: Medan, Padang, Pekanbaru, Palembang, Bandung, Semarang, Yogyakarta, Surabaya, Denpasar, Makassar, Balikpapan and Banjarmasin

NO	ACTION PLAN	ACTIVITIES / OBJECTIVES	LOCATION
9	Building a Non-Motorized Transport (Pedestrian and bike paths)	Establishment of Non-Motorized Transport in 12 Cities	12 City: Medan, Padang, Pekanbaru, Palembang, Bandung, Semarang, Yogyakarta, Surabaya, Denpasar, Makassar, Balikpapan and Banjarmasin
10	Testing all motor vehicles including private cars and motorcycles	Implementation of Motor Vehicle Inspection (CLA) for city / district. who do not have a collective unit Implementation of all motor vehicle testing every year so that all vehicles that do not meet emission limits, can not operate in the way	The entire province
11	Application of CO2 emission standards for passenger cars	Implementation of the application of CO2 emission standards begin to be applied to new vehicles in Indonesia	The entire province
12	Development of logistic system	Implementation of modern logistic system 9 package (1 year 1 package) to reduce the number of trips KM	12 City: Medan, Padang, Pekanbaru, Palembang, Bandung, Semarang, Yogyakarta, Surabaya, Denpasar, Makassar, Balikpapan and Banjarmasin
13	Application of Car Labeling	Implementation of labeling to all new vehicles according to fuel consumption (per 100 km) and CO2 emissions (in g / km)	The entire province
14	Speed limits on highways	Implementation of speed limits on all road tolls to reduce emissions by 0.07 million tons of CO2	The entire province

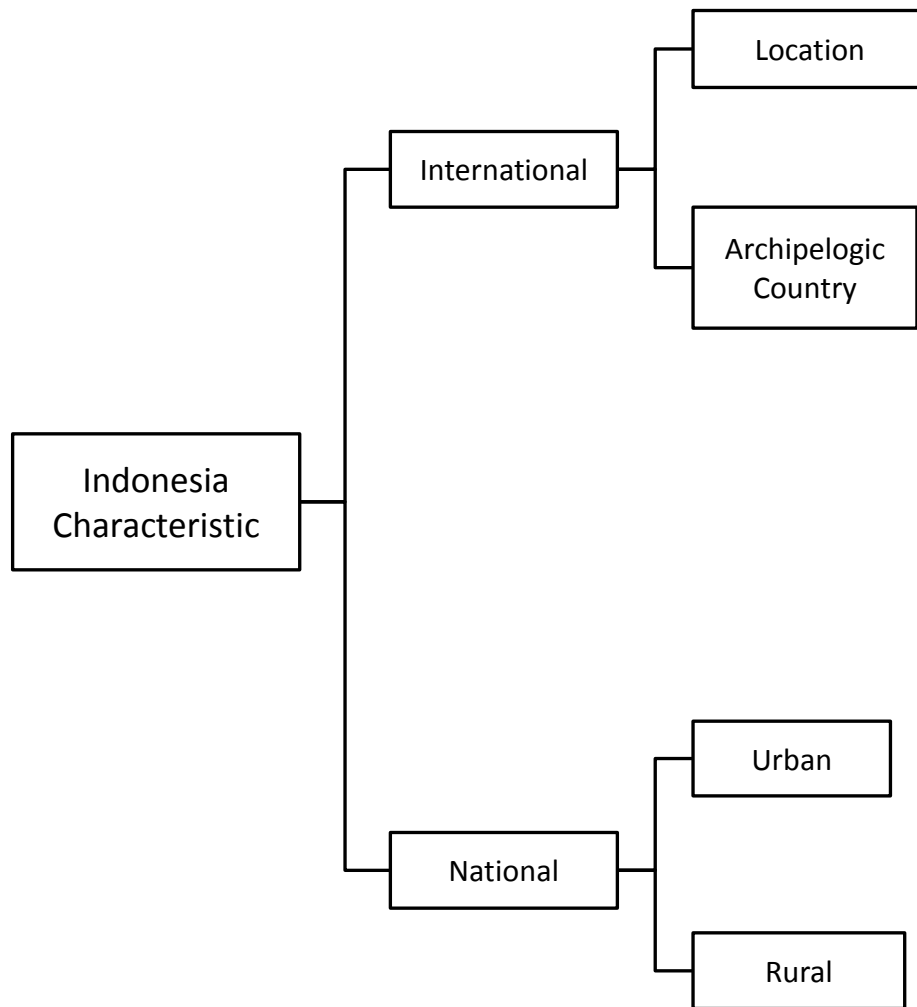


THANK YOU



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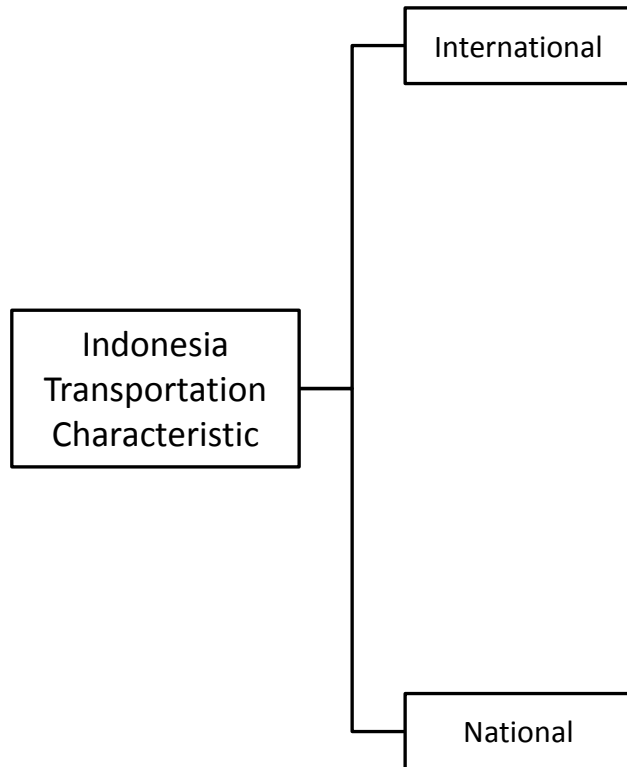
Location



- In term of geography Indonesia is part of South East Asia, part of East Asia and is located in larger of Asia Pasific Region, where a number of high income advance economies with high technologies;
- Indonesia, lying between the Indian Ocean and Pacific Ocean. It is in a strategic location astride or along major sealanes from Indian Ocean to Pasific Ocean;
- Indonesia is an archipelagic country extending 5,120 km from East to West and 1,760 Km from North to South. It compasses an estimated 17,508 island, only 6,000 of which are inhabited;
- It comprises 5 main islands Sumatera, Jawa, Kalimantan, Sulawesi, Papua and 2 major archipelagos (Nusa Tenggara and Maluku);
- According to the 2010 national census, the population of Indonesia is 237,6 million with population growth 1,9% and 58% of the population lived on Jawa (136,6 million) 21,3% lived on Sumatera (50,6 million);
- Urban population refer to people living in urban areas 49,79% (118,320,256 people) in 2010 tends to growing up. People living in rural areas 50,21% (119,321,070 people) in 2010 tends to decrease.
- In 1950, 15% of Indonesia's population lived in in urban areas, in 1990 this number doubled up to 30% and in 2010 become 49,79% where urbanization increased tremendously.

Indonesia Transportation Characteristic (1)

International



- International transportation system have been supported the growing demands of international trade and the globalization of production and consumption since containers and intermodal transportation improve the efficiency of global distribution, a growing share of general cargo moving globally is containerized.
- Two transportation modes are specifically supporting globalization and international trade; maritime and air transportation. Road and railways tend to account for a marginal share of international transportation since there are all modes for national or regional transport services;
- In term of weight, about 96% of the world trade is carried by maritime transportation. A large share of trade is handled by large containership linking producers and consumers along sealanes;
- Globalization has been supported and expended by the development of modern transport system, from large containership to small delivery tracks the whole distribution system has become closely integrated linking manufacturing activities with global markets;
- Congestion in many international transport terminal such ports and airports often causes delays and unreliable deliveries and need for improving inland transportation system;

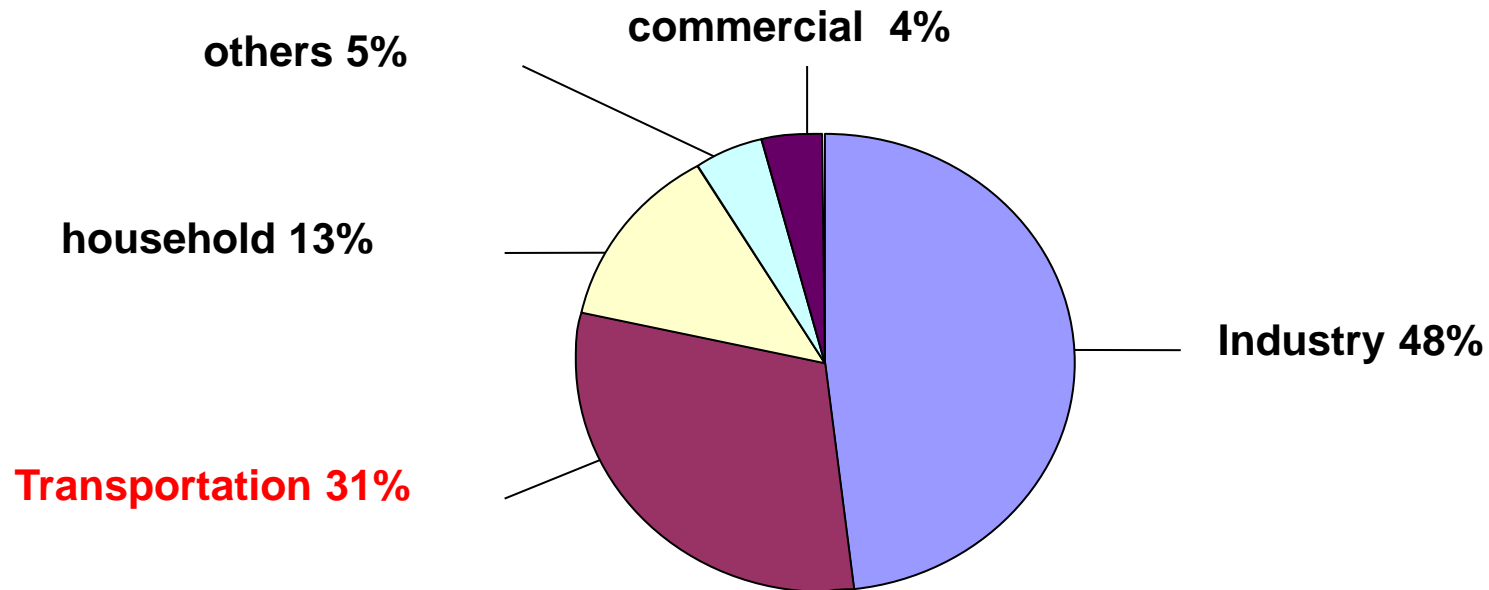
Indonesia Transportation Characteristic (2)

National

- Indonesia's transport system has been shaped overtime by the economic resources base of an archipelagic with thousand island and distribution more than 200 million people lived in 6000 thousand island and concentrated in 5 islands (Jawa, Sumatera, Kalimantan, Sulawesi, Papua) and 2 majors archipelagos (Nusa Tenggara and Maluku);
- Indonesia from long time ago international port and air port in located already in big city such as Jakarta, Surabaya, Medan, Makassar, etc. In the same time the city it self growing fast pararel with growth of people lived in the city including urbanization, congestion in many international and national ports and airports often causes delays and unreliable deliveries also acute needs for improving inland transportation system;
- Air Transportation's share of world trade in goods is only 2% measured by weight but more than 40% by value. For International opeations freight can account to 45% of the revenue of the regular airline. Air cargo related to time sensitive, valuable or perishable freight carrier over long distances;
- There are four unconnected railways networks in Jawa and Sumatera dedicated for marily to transport bulk commodities and long dictance passenger traffic. Sea transport is extremely important for economic integration and for domestic and foreign trade. It is will developed with each of major islands having at least one port city.

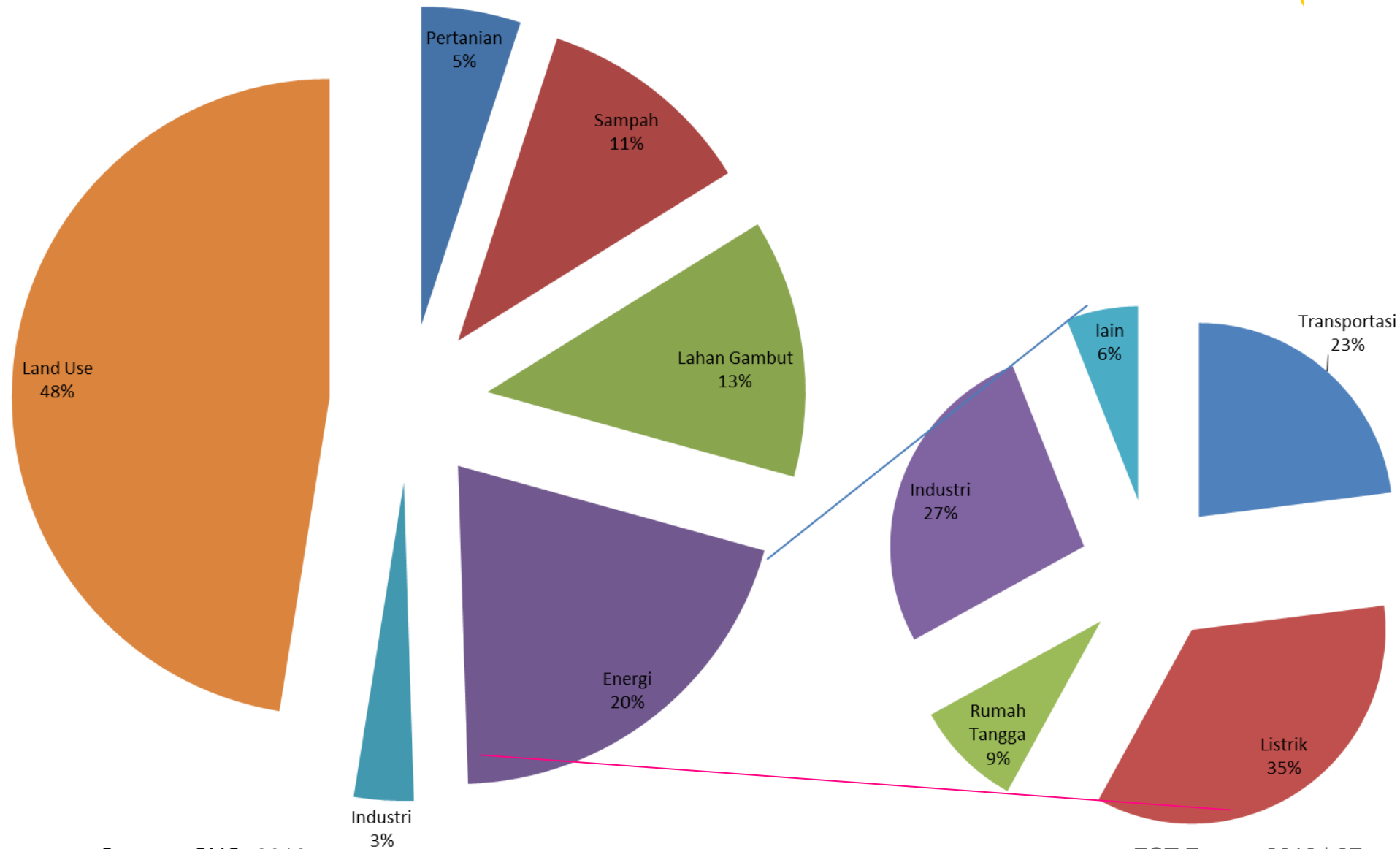
ENERGY CONSUMPTION

(SNC, 2010)



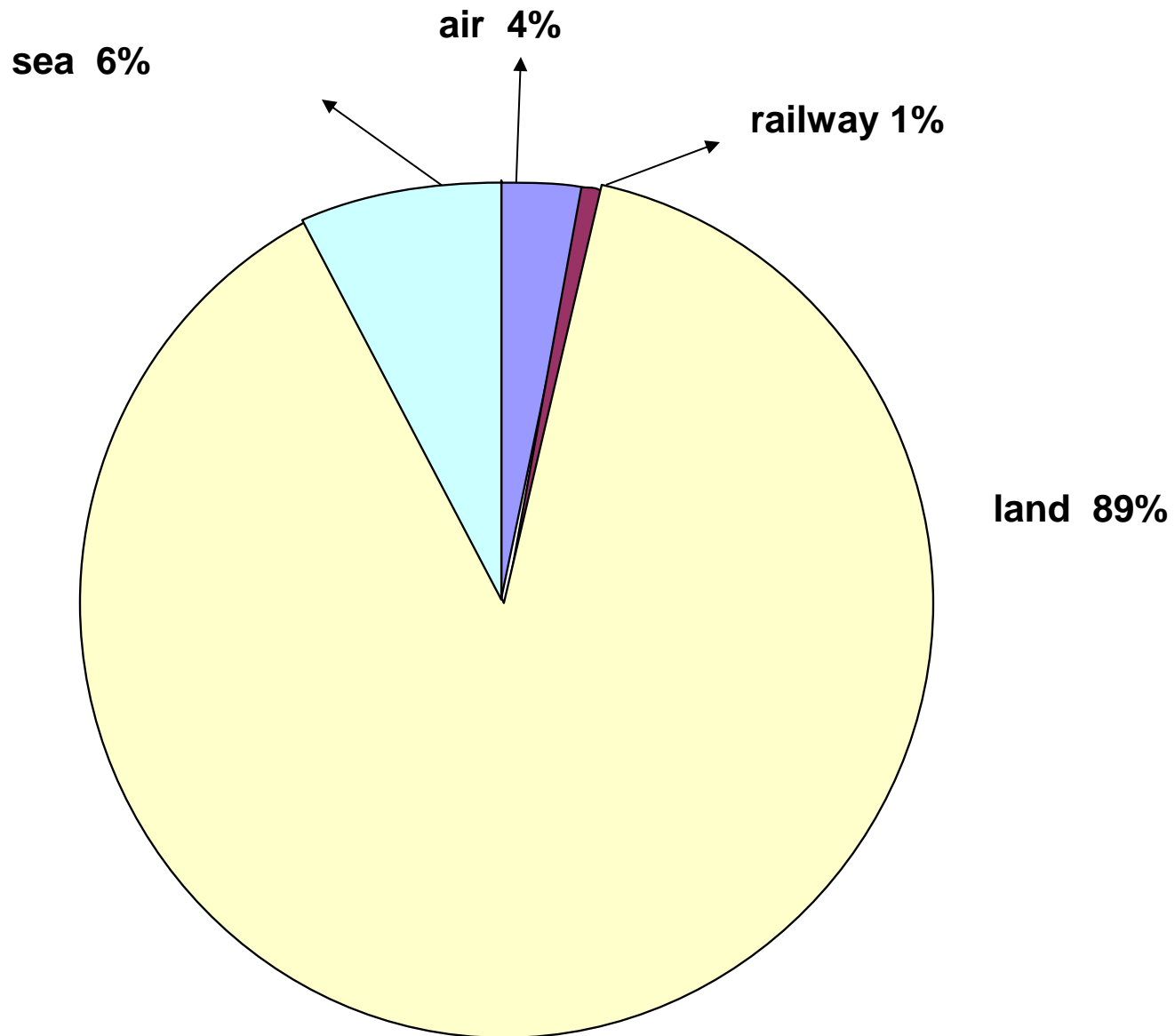
The growth rate is $\pm 3,1\%$ per year

PERCENTAGE OF EMISSIONS IN INDONESIA



Source : SNC, 2010

EMISSIONS FROM EACH MODE TRANSPORTATION



Statistic Mode Of Transport

Tahun	Mobil Penumpang	Bis	Truk	Sepeda Motor	Jumlah
1987	1,170,103	303,378	953,694	5,554,305	7,981,480
1988	1,073,106	385,731	892,651	5,419,531	7,771,019
1989	1,182,253	434,903	952,391	5,722,291	8,291,838
1990	1,313,210	468,550	1,024,296	6,082,966	8,889,022
1991	1,494,607	504,720	1,087,940	6,494,871	9,582,138
1992	1,590,750	539,943	1,126,262	6,941,000	10,197,955
1993	1,700,454	568,490	1,160,539	7,355,114	10,784,597
1994	1,890,340	651,608	1,251,986	8,134,903	11,928,837
1995	2,107,299	688,525	1,336,177	9,076,831	13,208,832
1996	2,409,088	595,419	1,434,783	10,090,805	14,530,095
1997	2,639,523	611,402	1,548,397	11,735,797	16,535,119
1998	2,769,375	626,680	1,586,721	12,628,991	17,611,767
1999*)	2,897,803	644,667	1,628,531	13,053,148	18,224,149
2000	3,038,913	666,280	1,707,134	13,563,017	18,975,344
2001	3,189,319	680,550	1,777,293	15,275,073	20,922,235
2002	3,403,433	714,222	1,865,398	17,002,130	22,985,183
2003	3,792,510	798,079	2,047,022	19,976,376	26,613,987
2004	4,231,901	933,251	2,315,781	23,061,021	30,541,954
2005	5,076,230	1,110,255	2,875,116	28,531,831	37,623,432
2006	6,035,291	1,350,047	3,398,956	32,528,758	43,313,052
2007	6,877,229	1,736,087	4,234,236	41,955,128	54,802,680
2008	7,489,852	2,059,187	4,452,343	47,683,681	61,685,063
2009	7,910,407	2,160,973	4,452,343	52,767,093	67,336,644
2010	8,891,041	2,250,109	4,687,789	61,078,188	76,907,127
2011	9,548,866	2,254,406	4,958,738	68,839,341	85,601,351

ENERGY CONSUMPTION FOR TRANSPORT (.000 SBM) PER EACH TYPE, 2005 - 2011

Year	Avgas	Avtur	Mogas	Minyak Tanah	Minyak Solar	Minyak Diesel	Minyak Bakar	Total BBM		LPG		Non BBM
								Ribu SBM	Ribu KL	Ribu SBM	Ribu Ton	
2005	17	13.682	101.867	67.395	175.518	5.893	33.431	397.802	63.927	8.453	992	10.334
2006	19	14.303	99.458	59.412	164.656	3.289	33.554	374.691	60.222	9.414	1.104	11.457
2007	12	14.845	105.940	58.672	166.448	1.781	35.756	383.453	61.664	10.925	1.282	39.873
2008	11	15.526	114.796	46.836	175.148	1.196	34.594	388.107	62.388	15.718	1.844	16.658
2009	9	16.262	129.255	28.332	173.134	959	31.190	379.142	61.037	25.259	2.963	55.663
2010	15	22.180	148.575	18.093	174.669	990	23.719	388.241	61.730	31.966	4.089	55.765
2011	14	20.945	165.308	12.724	169.175	856	25.029	394.052	61.472	31.778	4.065	56.935

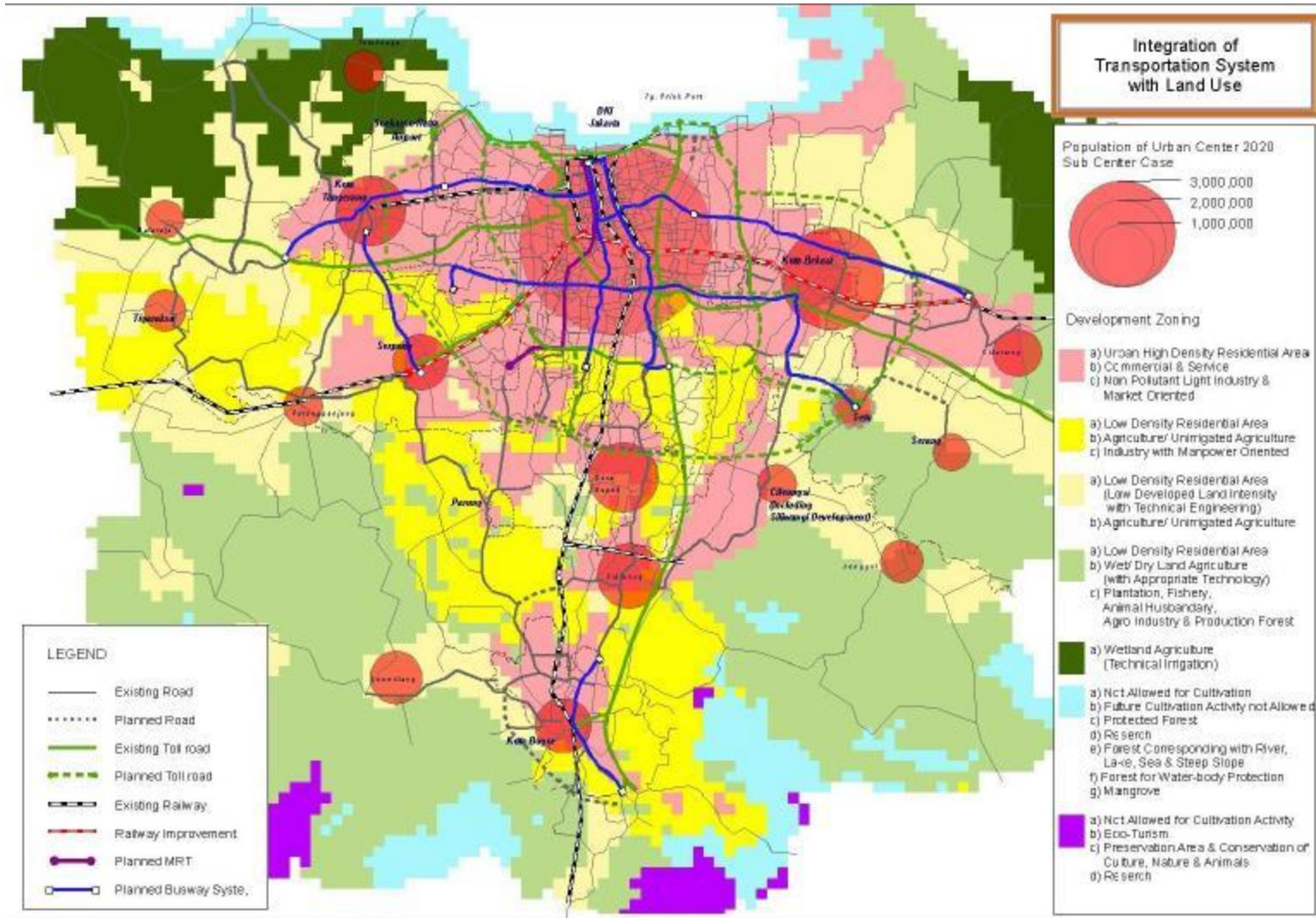
EMISSION CO₂ (.000 TON) FROM VEHICLE PER EACH PROVINCE, 2000 – 2007

No.	Provinsi	2000	2001	2002	2003	2004	2005	2006	2007
1	N. Aceh Darussalam	1.610	1.137	1.364	1.390	1.714	1.497	1.309	1.687
2	Sumatera Utara	3.573	3.779	3.730	3.950	4.250	3.956	3.598	3.321
3	Sumatera Barat	1.298	1.523	1.474	1.440	1.753	1.706	1.503	1.598
4	R i a u	1.613	1.775	1.913	1.965	2.286	2.386	2.109	1.967
5	Jambi	656	720	732	720	933	1.152	1.293	1.715
6	Sumatera Selatan	1.564	1.751	1.557	1.428	1.525	1.570	1.558	1.636
7	Bengkulu	228	250	250	264	321	361	386	537
8	Lampung	922	996	990	1.070	1.221	1.208	1.159	1.174
9	Bangka Belitung	-	-	-	-	563	482	393	467
10	Kepulauan Riau	-	-	-	-	-	626	635	516
11	DKI Jakarta	14.375	15.209	14.934	15.501	16.703	17.163	15.118	16.267
12	Jawa Barat	6.066	6.161	6.114	5.737	6.104	4.944	4.673	4.515
13	Jawa Tengah	6.010	7.481	7.810	8.246	9.149	9.175	8.754	7.914
14	DI Yogyakarta	1.370	1.385	1.451	1.493	1.666	1.769	1.764	2.277
15	Jawa Timur	8.354	8.687	8.804	9.268	9.892	9.247	8.399	8.999
16	Banten	-	-	-	-	631	619	582	663
17	Bali	1.972	2.184	2.284	2.203	2.576	2.616	2.556	2.656
18	Nusa Tenggara Barat	501	542	546	531	622	678	740	845
19	Nusa Tenggara Timur	331	290	285	264	310	385	435	530
20	Kalimantan Barat	703	360	782	782	976	1.143	1.237	1.444
21	Kalimantan Tengah	322	332	336	373	509	591	699	905
22	Kalimantan Selatan	1.014	1.099	1.117	1.109	1.357	1.426	1.479	1.714
23	Kalimantan Timur	978	1.088	1.206	1.235	1.626	1.884	2.066	2.189
24	Sulawesi Utara	492	591	584	565	626	611	667	755
25	Sulawesi Tengah	826	837	861	836	1.068	1.115	1.152	1.247
26	Sulawesi Selatan	1.455	1.271	1.399	1.319	1.530	1.782	1.904	2.044
27	Sulawesi Tenggara	234	262	268	262	343	397	419	581
28	Gorontalo	-	-	-	-	15	114	124	148
29	Maluku	342	355	337	323	335	304	267	274
30	Maluku Utara	-	-	-	-	2	2	2	2
31	Papua	358	388	378	399	436	396	375	453
	Total	57.168	60.452	61.507	62.673	71.043	71.304	67.356	71.040

Source : Kementrian
Lingkungan Hidup, Emisi Gas
Rumah Kaca
Dalam Angka -2009

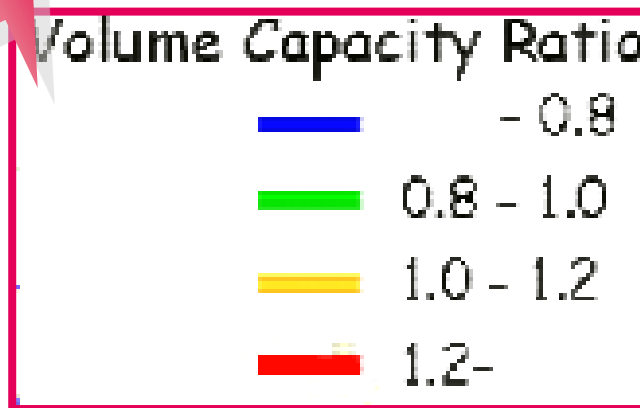
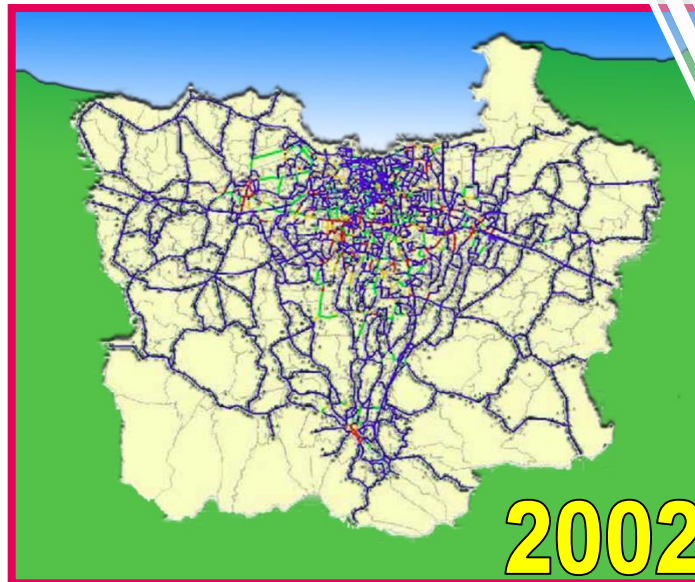
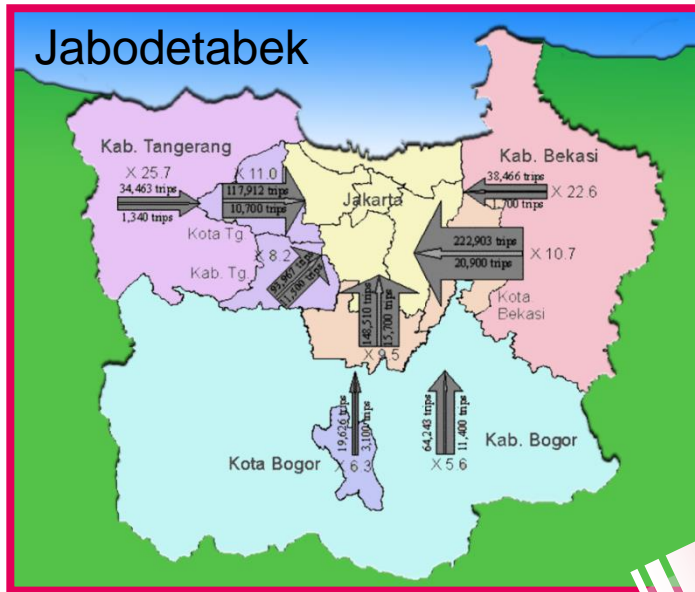
*Dihitung berdasarkan rata-rata
konsumsi premium dan solar
per provinsi dikalikan dengan
faktor emisi*

JAKARTA CASE : INTEGRATION OF TRANSPORTATION SYSTEM WITH LAND USE



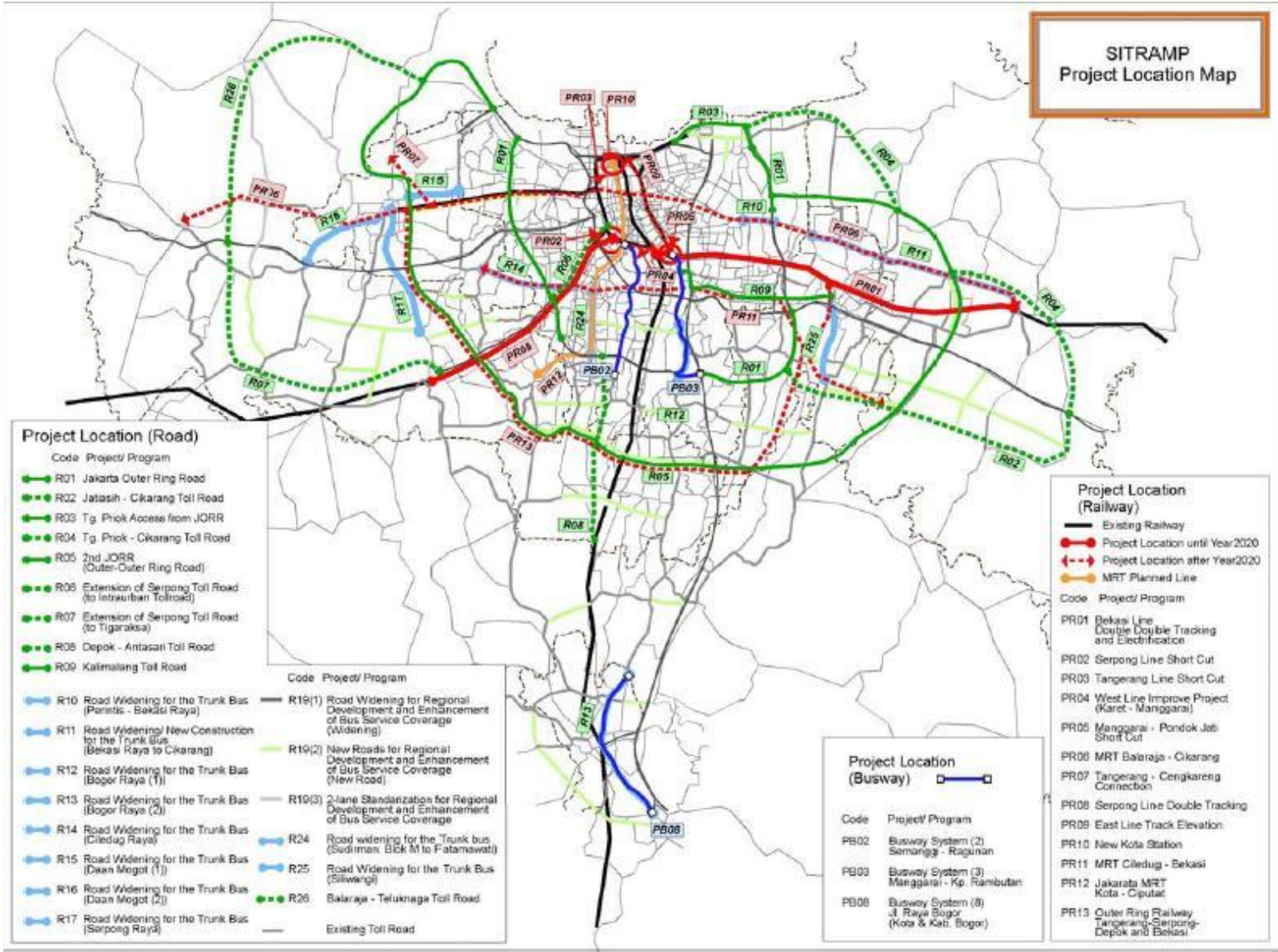
Source : JICA, 2004

MAIN TRENDS AND TRANSPORTATION SECTOR DEVELOPMENT & IMPACT



**Macet Serius Tahun 2020
(Sitramp)**

**SITRAMP
Project Location Map**



Project Location (Road)

- | Code | Project/ Program |
|------|---|
| R01 | Jakarta Outer Ring Road |
| R02 | Jatiasih - Cikarang Toll Road |
| R03 | Tg. Priok Access from JORR |
| R04 | Tg. Priok - Cikarang Toll Road |
| R05 | 2nd JORR (Outer-Outer Ring Road) |
| R06 | Extension of Serpong Toll Road (to Intraurban Tollroad) |
| R07 | Extension of Serpong Toll Road (to Tigaraksa) |
| R08 | Dopok - Antasari Toll Road |
| R09 | Katmalang Toll Road |
| R10 | Road Widening for the Trunk Bus (Pondok - Bekasi Raya) |
| R11 | Road Widening/ New Construction for the Trunk Bus (Bekasi Raya to Cikarang) |
| R12 | Road Widening for the Trunk Bus (Bogor Raya (1)) |
| R13 | Road Widening for the Trunk Bus (Bogor Raya (2)) |
| R14 | Road Widening for the Trunk Bus (Ciledug Raya) |
| R15 | Road Widening for the Trunk Bus (Daan Mogot (1)) |
| R16 | Road Widening for the Trunk Bus (Daan Mogot (2)) |
| R17 | Road Widening for the Trunk Bus (Serpong Raya) |

- | Code | Project/ Program |
|--------|---|
| R19(1) | Road Widening for Regional Development and Enhancement of Bus Service Coverage (Widening) |
| R19(2) | New Roads for Regional Development and Enhancement of Bus Service Coverage (New Road) |
| R19(3) | 2-lane Standardization for Regional Development and Enhancement of Bus Service Coverage |
| R24 | Road widening for the Trunk bus (Sudirman, BCK M to Fatamawati) |
| R25 | Road Widening for the Trunk Bus (Silwangi) |
| R26 | Balaraja - Teluknaga Toll Road |
| | Existing Toll Road |

Project Location (Railway)

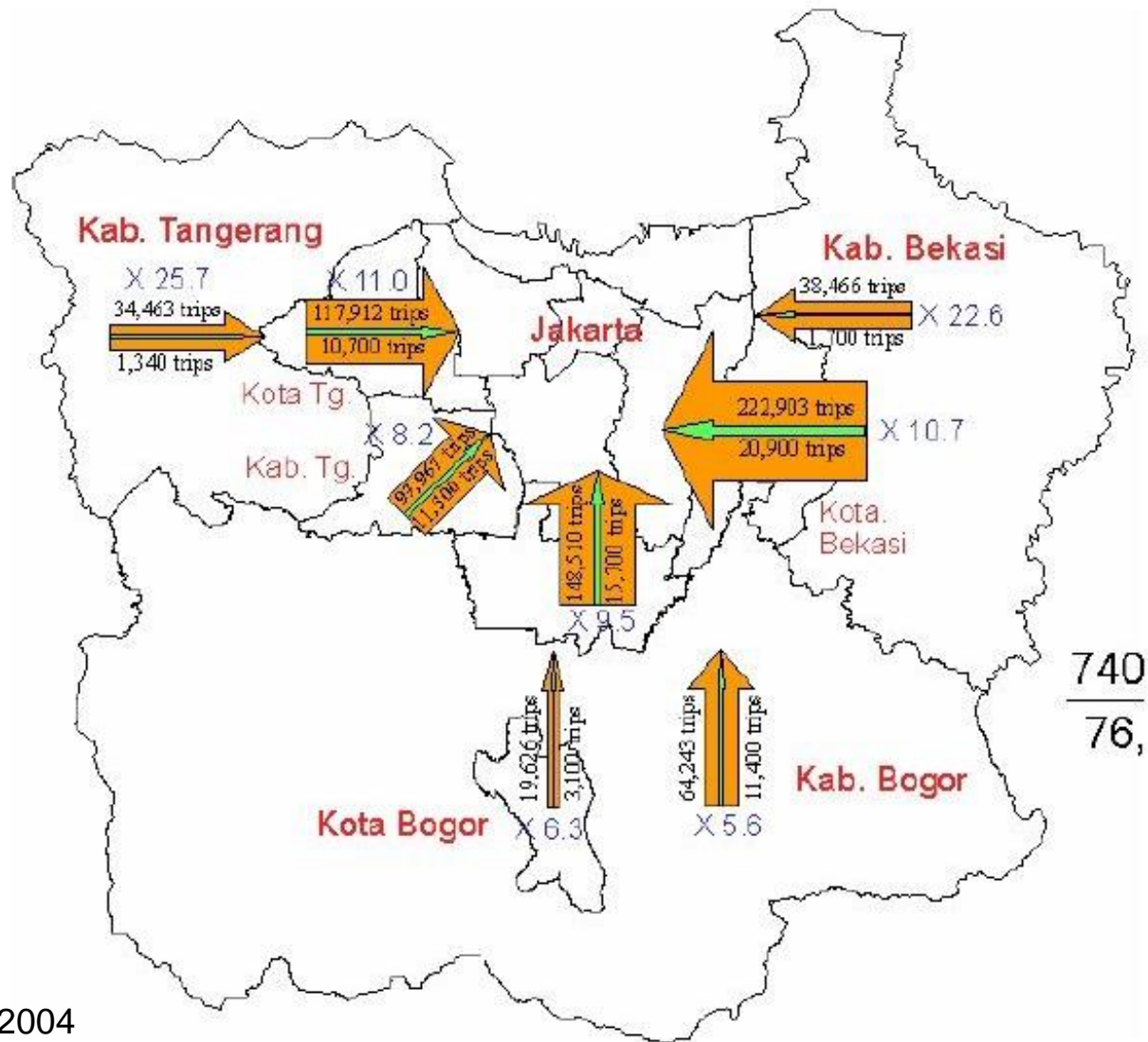
- | Code | Project/ Program |
|------|---|
| | Existing Railway |
| | Project Location until Year 2020 |
| | Project Location after Year 2020 |
| | MRT Planned Line |
| PR01 | Bekasi Line Double Tracking and Electrification |
| PR02 | Serpong Line Short Cut |
| PR03 | Tangerang Line Short Cut |
| PR04 | West Line Improve Project (Karet - Manggarai) |
| PR05 | Manggarai - Pondok Jati Short Cut |
| PR06 | MRT Balaraja - Cikarang |
| PR07 | Tangerang - Cengkareng Connection |
| PR08 | Serpong Line Double Tracking |
| PR09 | East Line Track Elevation |
| PR10 | New Kota Station |
| PR11 | MRT Ciledug - Bekasi |
| PR12 | Jakarta MRT Kota - Ciputat |
| PR13 | Outer Ring Railway Tangerang - Serpong - Depok and Bekasi |

Project Location (Busway)

- | Code | Project/ Program |
|------|---|
| PB02 | Busway System (2) Semanggi - Ragunan |
| PB03 | Busway System (3) Manggarai - Kp. Rambutan |
| PB08 | Busway System (8) J. Raya Bogor (Kota & Kab. Bogor) |

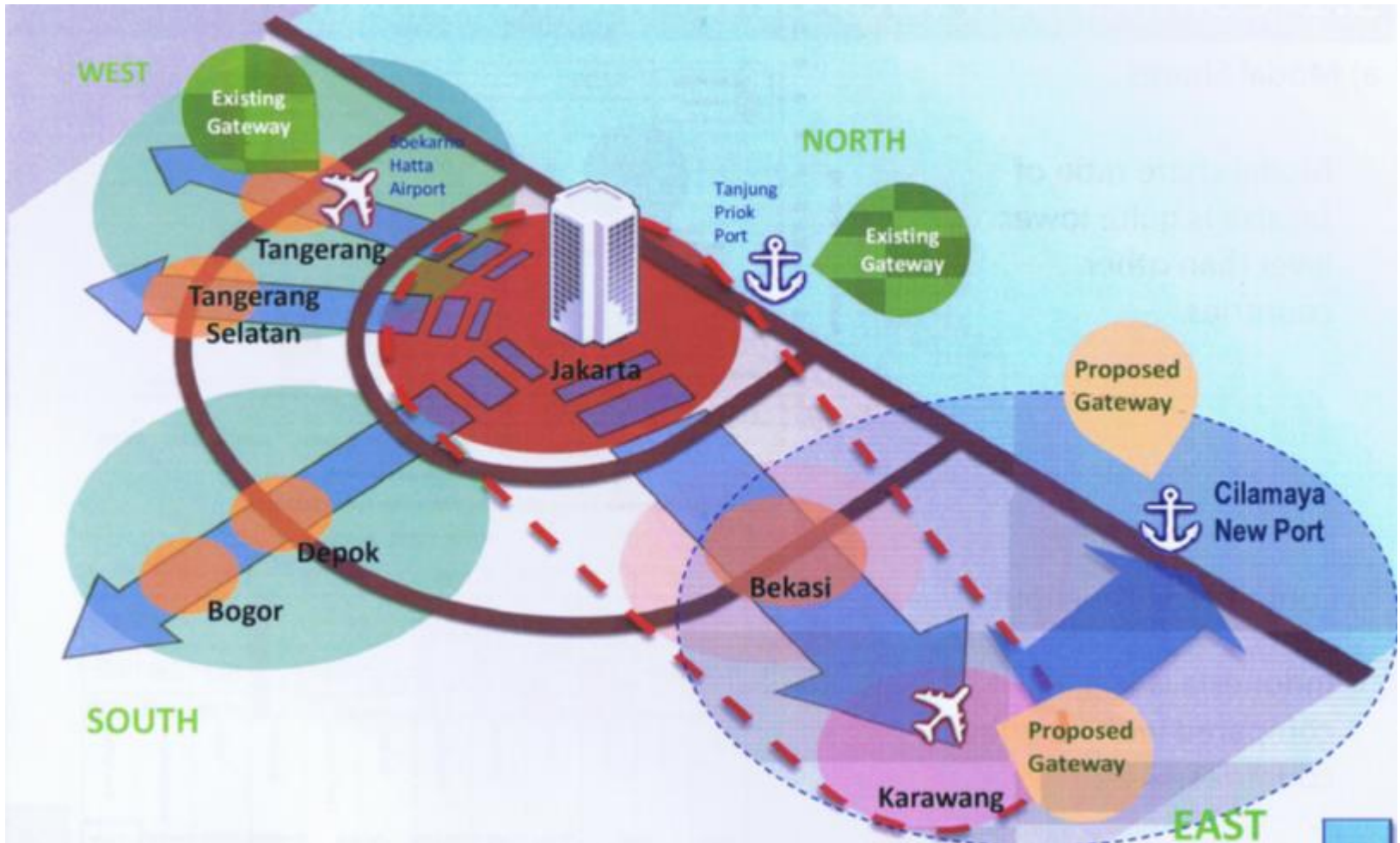
Source : JICA, 2004

INCREASING DEMANDS FOR COMMUTER TRAFFIC AROUND THE OUTSKIRTS OF JAKARTA



Source : JICA, 2004

Metropolitan Priority Area (MPA) Jabodetabek Vision 2030

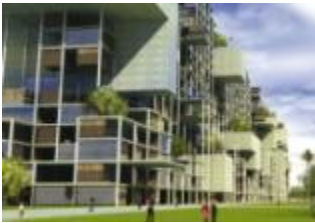


Sumber : MPA Steering Committee, 2011

METROPOLITAN DEVELOPMENT CONCEPT

AS THE LATEST AND MODERN METROPOLITAN

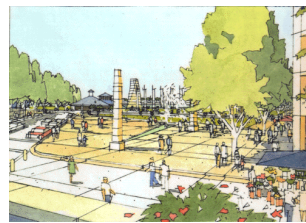
Planned infrastructure cover:



Compact and integrated residential



Integrated public transport system



Multi function open space @ 5 Ha



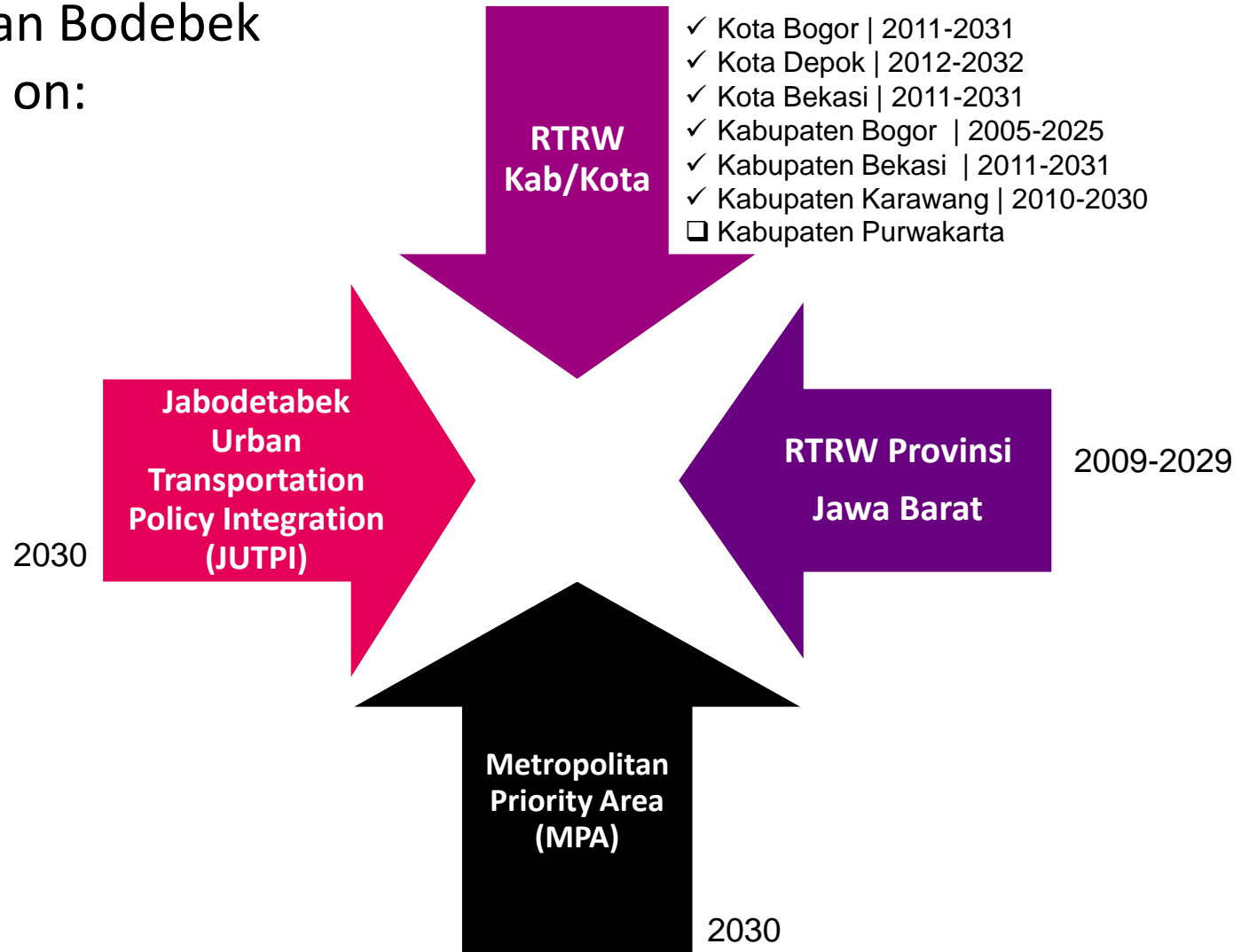
ICT, Drainage, Sewerage, Water

Other Facilities:

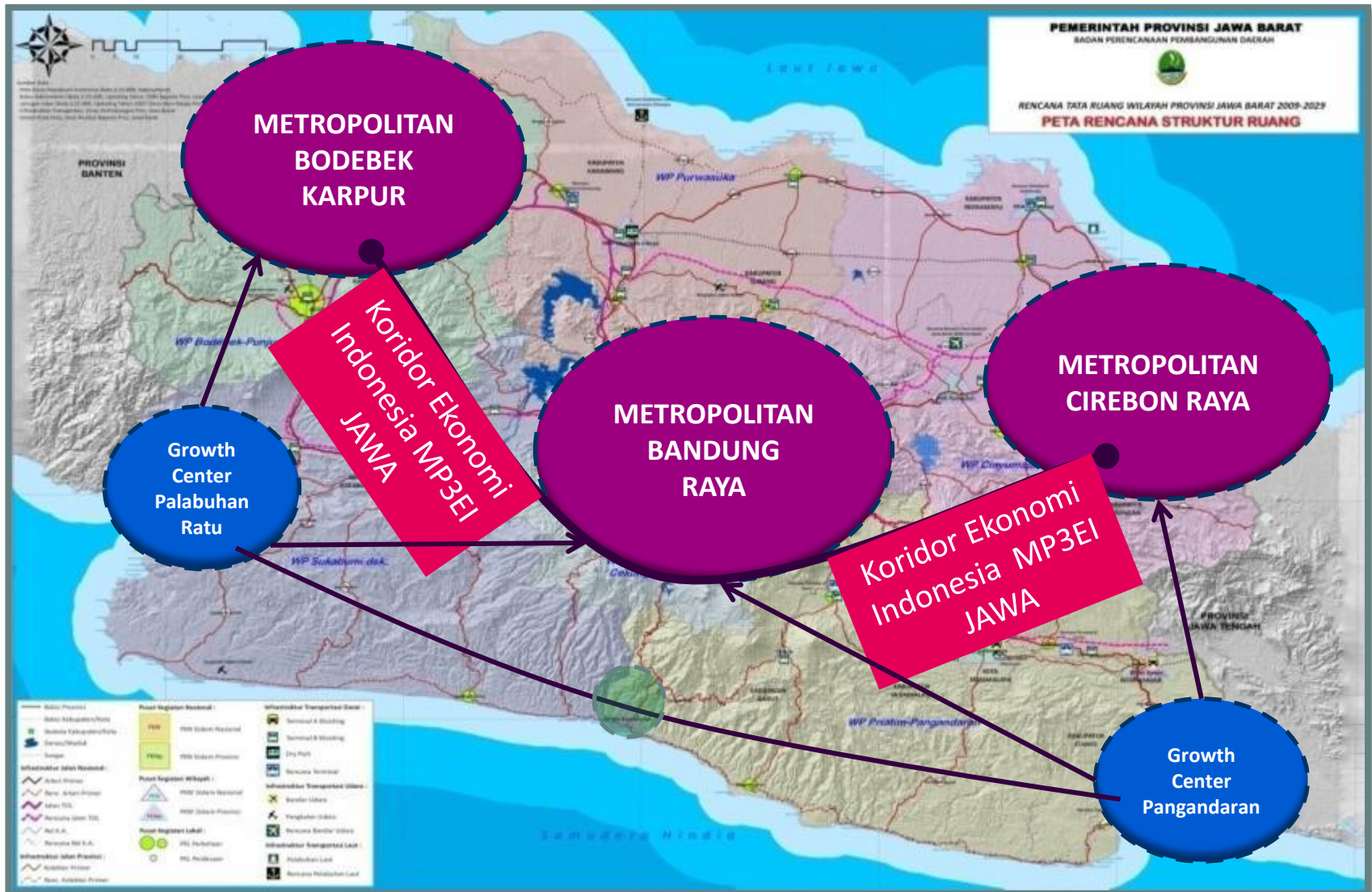
- Health
- Education
- Offices
- Religion
- Commercial
- Urban Tourism
- Social



Infrastructure Development Plan at Metropolitan Bodebek Karpur, based on:



AGLOMERATION IN WEST JAVA



METROPOLITAN BODEBEK KARPUR 2010

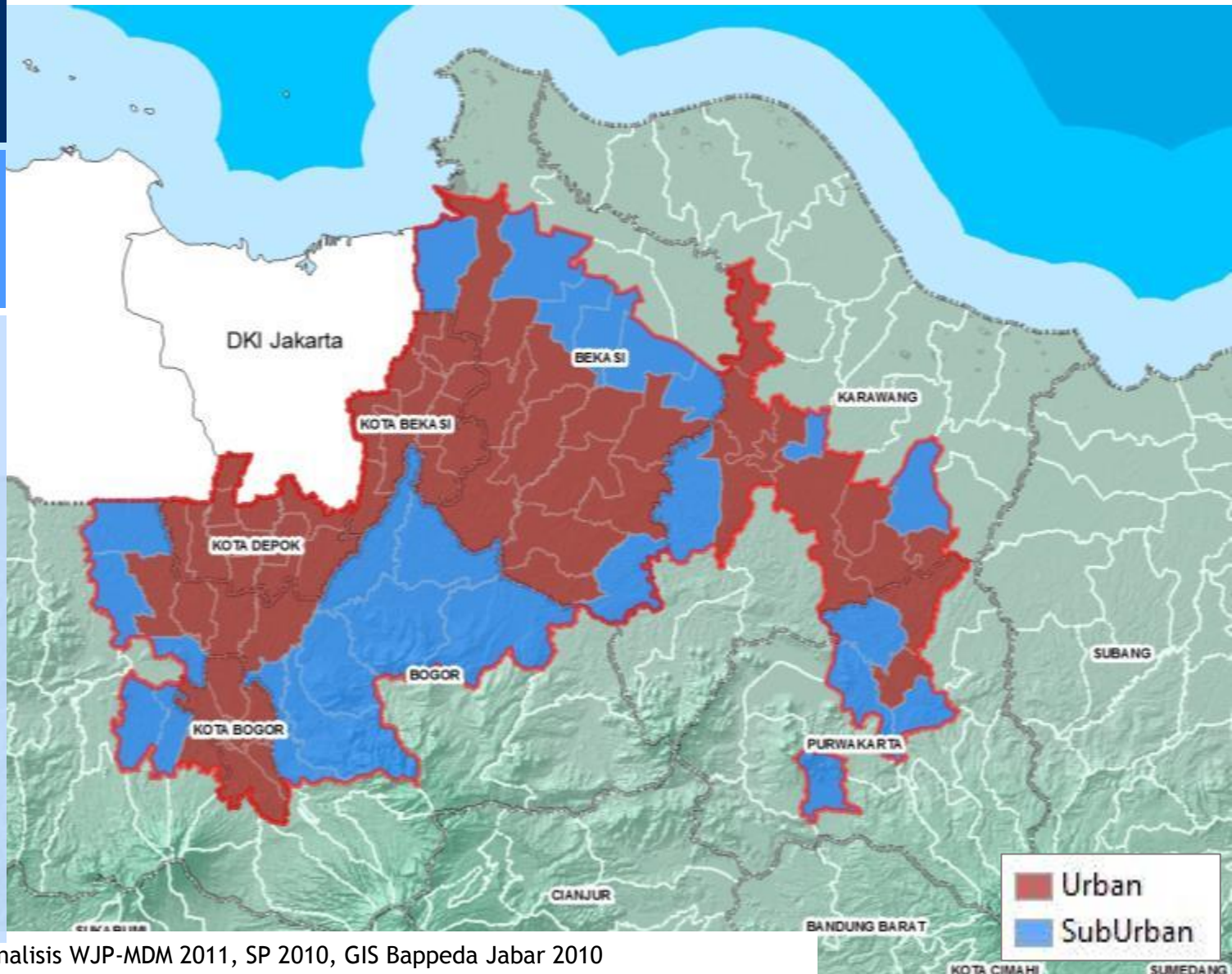
Kriteria:

1. Jumlah Penduduk
2. Aktivitas Ekonomi
3. Daerah Terbangun

- 7 kota/ kabupaten
- 82 kecamatan
- populasi 11,6 juta jiwa
- 300.845 Ha

Terdiri atas

- ✓ 12 kecamatan di Kota Bekasi; 2.336.489 jiwa; 21.565 Ha
- ✓ 19 kecamatan di Kabupaten Bekasi; 2.358.560 jiwa; 92.160 Ha
- ✓ 6 kecamatan di Kota Bogor; 949,066 jiwa; 11.771 Ha
- ✓ 17 kecamatan di Kabupaten Bogor; 2,704,623 jiwa; 88.004 Ha
- ✓ 11 kecamatan di Kota Depok; 1.736.565 jiwa; 20.308 Ha
- ✓ 6 kecamatan di Kabupaten Purwakarta; 439.583 jiwa; 21.238 Ha
- ✓ 11 kecamatan di Kabupaten Karawang; 1.084.637 jiwa; 45.799 Ha



Sumber: Analisis WJP-MDM 2011, SP 2010, GIS Bappeda Jabar 2010

METROPOLITAN BODEBEK KARPUR 2015

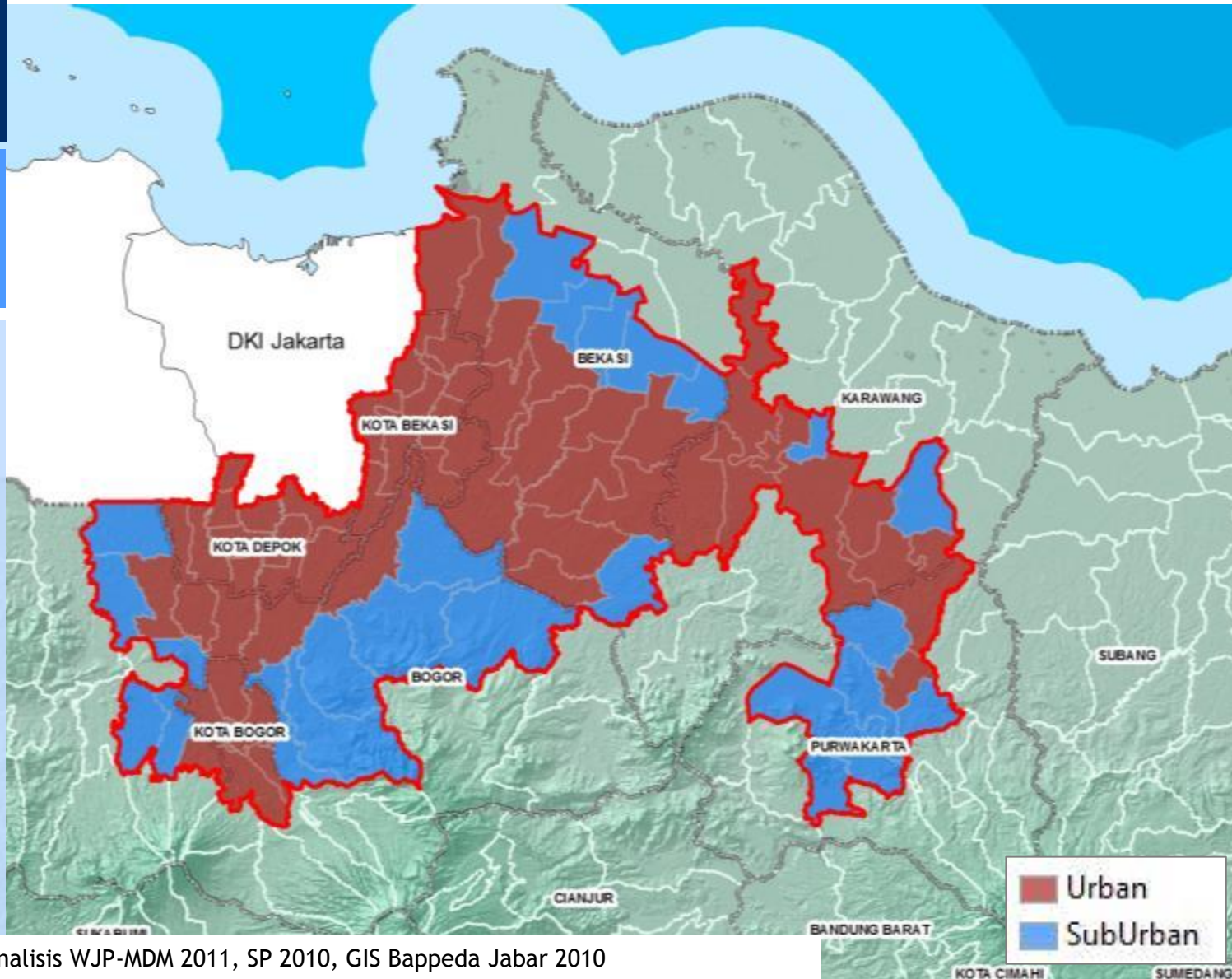
Kriteria:

1. Jumlah Penduduk
2. Aktivitas Ekonomi
3. Daerah Terbangun

- 7 kota/ kabupaten
- 83 kecamatan
- populasi 14,3 juta jiwa
- 310.753 Ha

Terdiri atas

- ✓ 12 kecamatan di Kota Bekasi; 2.863.873 jiwa; 21.564.88 Ha
- ✓ 19 kecamatan di Kabupaten Bekasi; 2.890.926 jiwa; 92.159.94 Ha
- ✓ 6 kecamatan di Kota Bogor; 1.163.873 jiwa; 11.770.99 Ha
- ✓ 17 kecamatan di Kabupaten Bogor; 3.315.101 jiwa; 88.003,91 Ha
- ✓ 11 kecamatan di Kota Depok; 2.128.536 jiwa; 20.308,37 Ha
- ✓ 7 kecamatan di Kabupaten Purwakarta; 605.936 jiwa; 31.145,63 Ha
- ✓ 11 kecamatan di Kabupaten Karawang; 1.329.457 jiwa; 45.799,44 Ha



Sumber: Analisis WJP-MDM 2011, SP 2010, GIS Bappeda Jabar 2010

METROPOLITAN BODEBEK KARPUR 2020

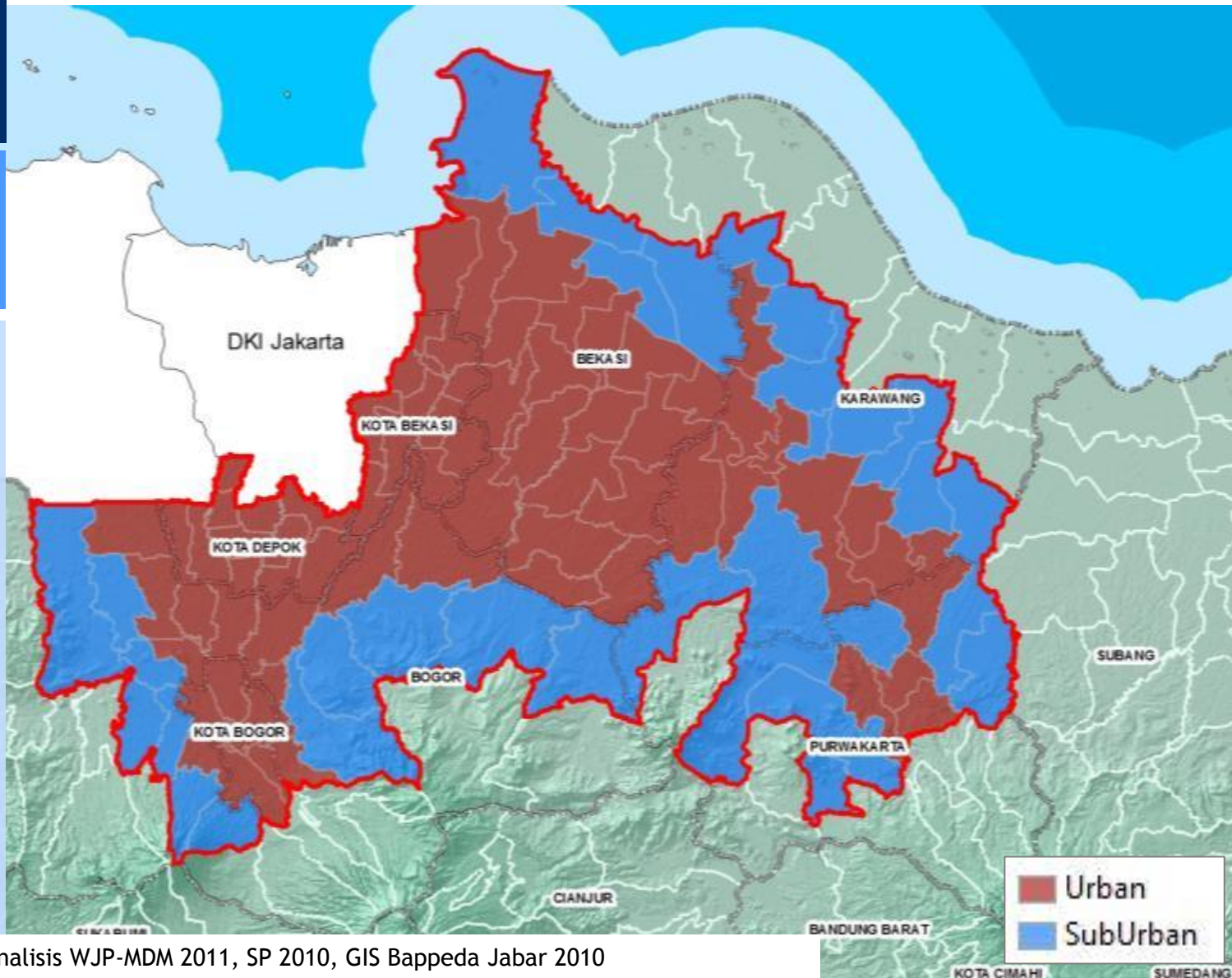
Kriteria:

1. Jumlah Penduduk
2. Aktivitas Ekonomi
3. Daerah Terbangun

- 7 kota/ kabupaten
- 103 kecamatan
- populasi 18,36 juta jiwa
- 450.924 Ha

Terdiri atas

- ✓ 12 kecamatan di Kota Bekasi; 3.383.074 jiwa; 21.565 Ha
- ✓ 23 kecamatan di Kabupaten Bekasi; 3.731.000 jiwa; 126.471 Ha
- ✓ 6 kecamatan di Kota Bogor; 1.374.182 jiwa; 11.771 Ha
- ✓ 21 kecamatan di Kabupaten Bogor; 4.275.259 jiwa; 114.753 Ha
- ✓ 11 kecamatan di Kota Depok; 2.514.426 jiwa; 20.308 Ha
- ✓ 11 kecamatan di Kabupaten Purwakarta; 885.171 jiwa; 56.525 Ha
- ✓ 19 kecamatan di Kabupaten Karawang; 2.192.067 jiwa; 99.531 Ha



Sumber: Analisis WJP-MDM 2011, SP 2010, GIS Bappeda Jabar 2010

METROPOLITAN BODEBEK KARPUR 2025

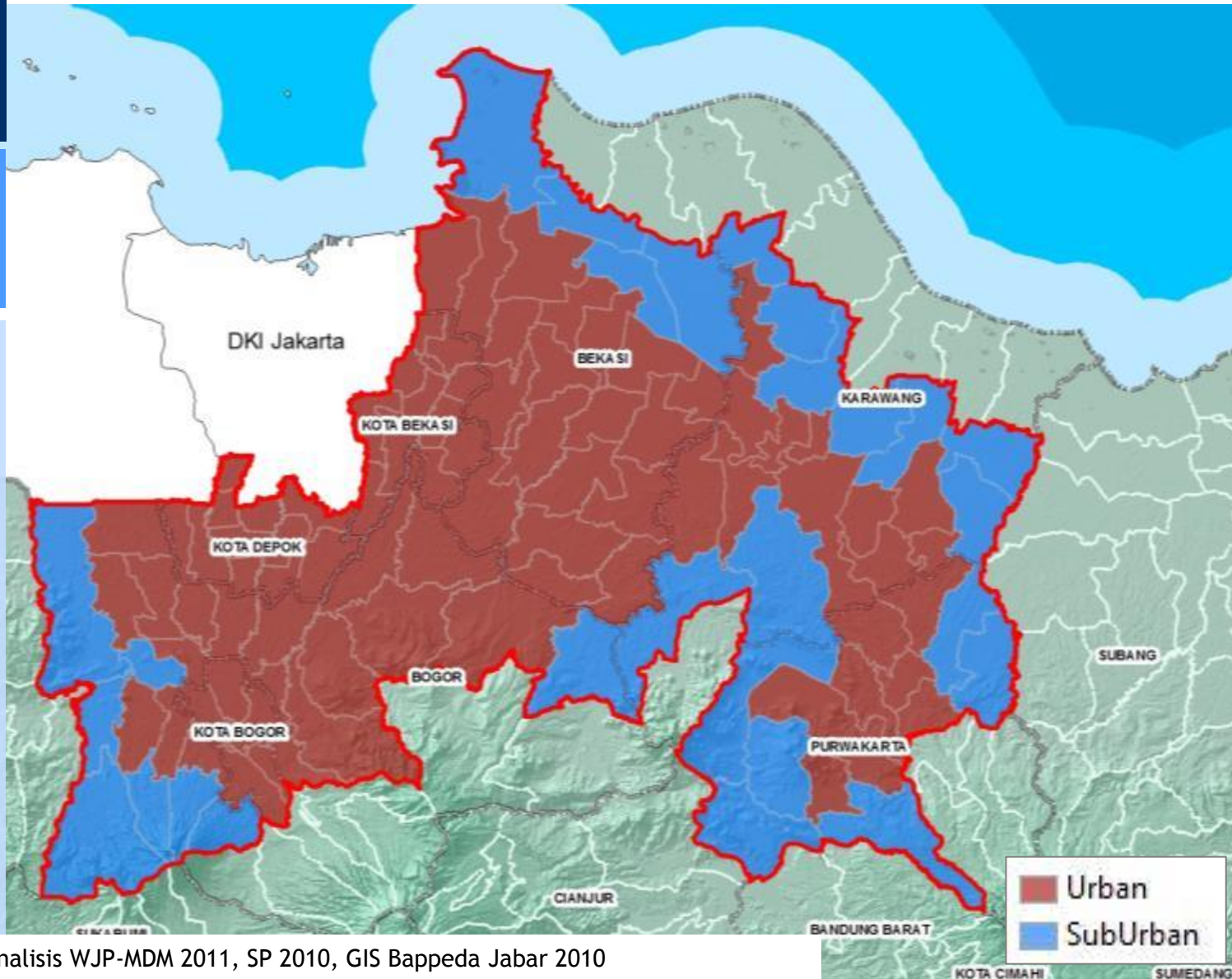
Kriteria:

1. Jumlah Penduduk
2. Aktivitas Ekonomi
3. Daerah Terbangun

- 7 kota/ kabupaten
- 111 kecamatan
- populasi 23,16 juta jiwa
- 503.634 Ha

Terdiri atas

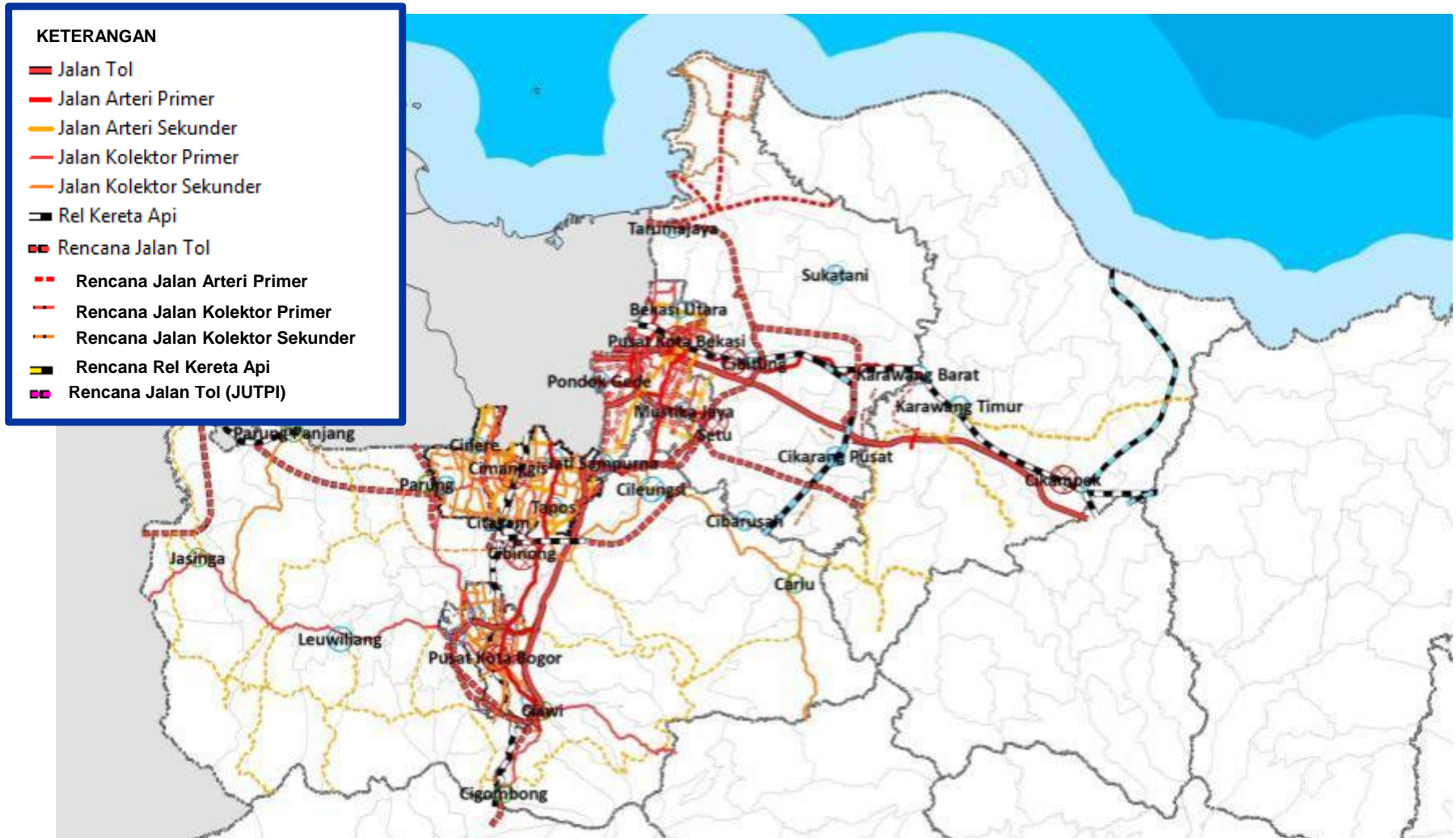
- ✓ 12 kecamatan di Kota Bekasi; 4.061.625 jiwa; 21.565 Ha
- ✓ 23 kecamatan di Kabupaten Bekasi; 4.479.335 jiwa; 126.471 Ha
- ✓ 6 kecamatan di Kota Bogor; 1.649.804 jiwa; 11.771 Ha
- ✓ 25 kecamatan di Kabupaten Bogor; 5.933.750 jiwa; 138.488 Ha
- ✓ 11 kecamatan di Kota Depok; 3.018.750 jiwa; 20.308 Ha
- ✓ 14 kecamatan di Kabupaten Purwakarta; 1.296.950 jiwa; 79.793 Ha
- ✓ 20 kecamatan di Kabupaten Karawang; 2,720,472 jiwa; 105.238 Ha



Sumber: Analisis WJP-MDM 2011, SP 2010, GIS Bappeda Jabar 2010

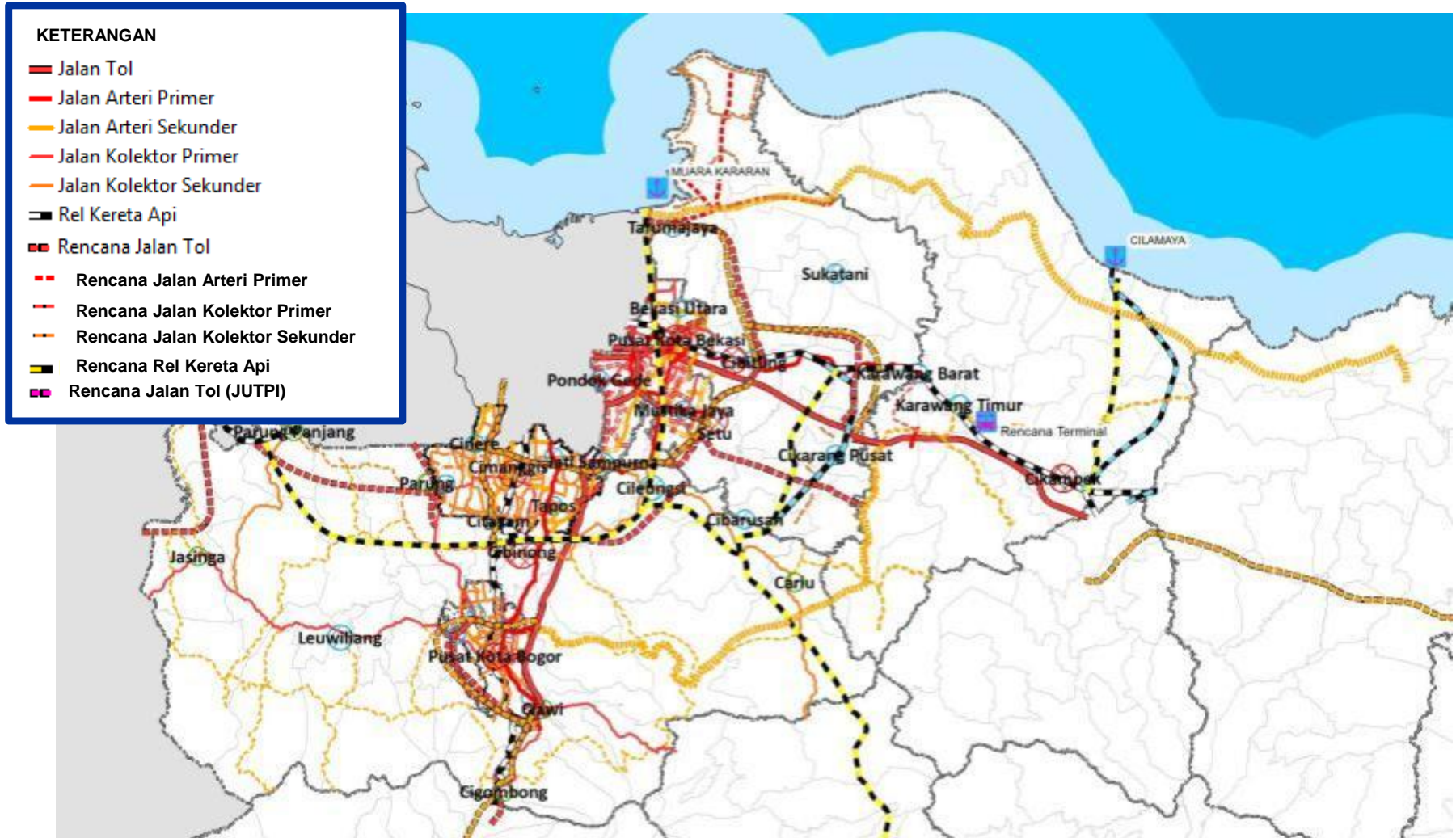
Infrastructure Development Plan Metropolitan Bodebek Karpur

Based on Spatial Plan Kabupaten/Kota



Infrastructure Development Plan Metropolitan Bodebek Karpur

Based on Spatial Plan Kabupaten/Kota

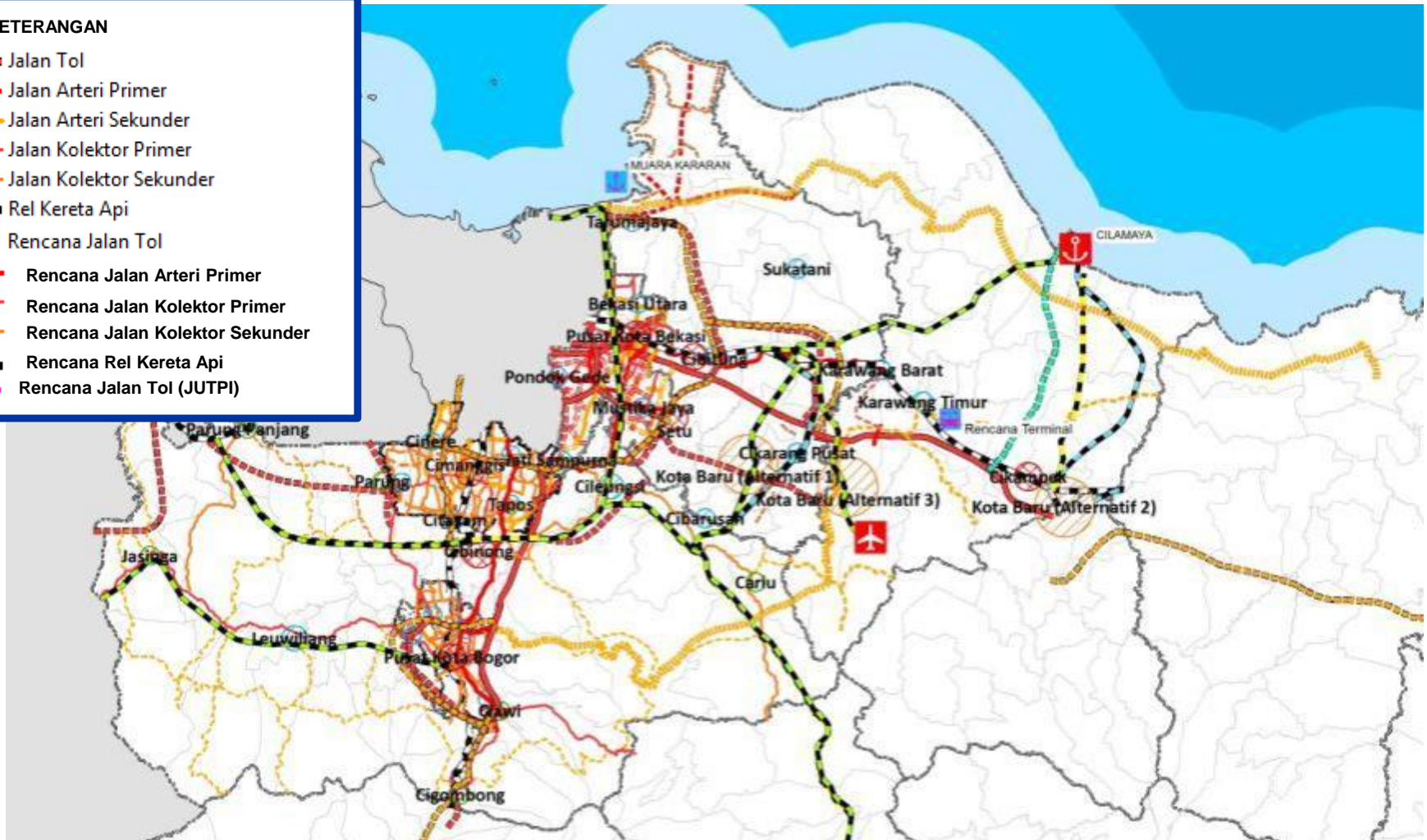


Infrastructure Development Plan Metropolitan Bodebek Karpur

Based on Spatial Plan Kabupaten/Kota, Spatial Plan West Java Province, & Metropolitan Priority Area (MPA)

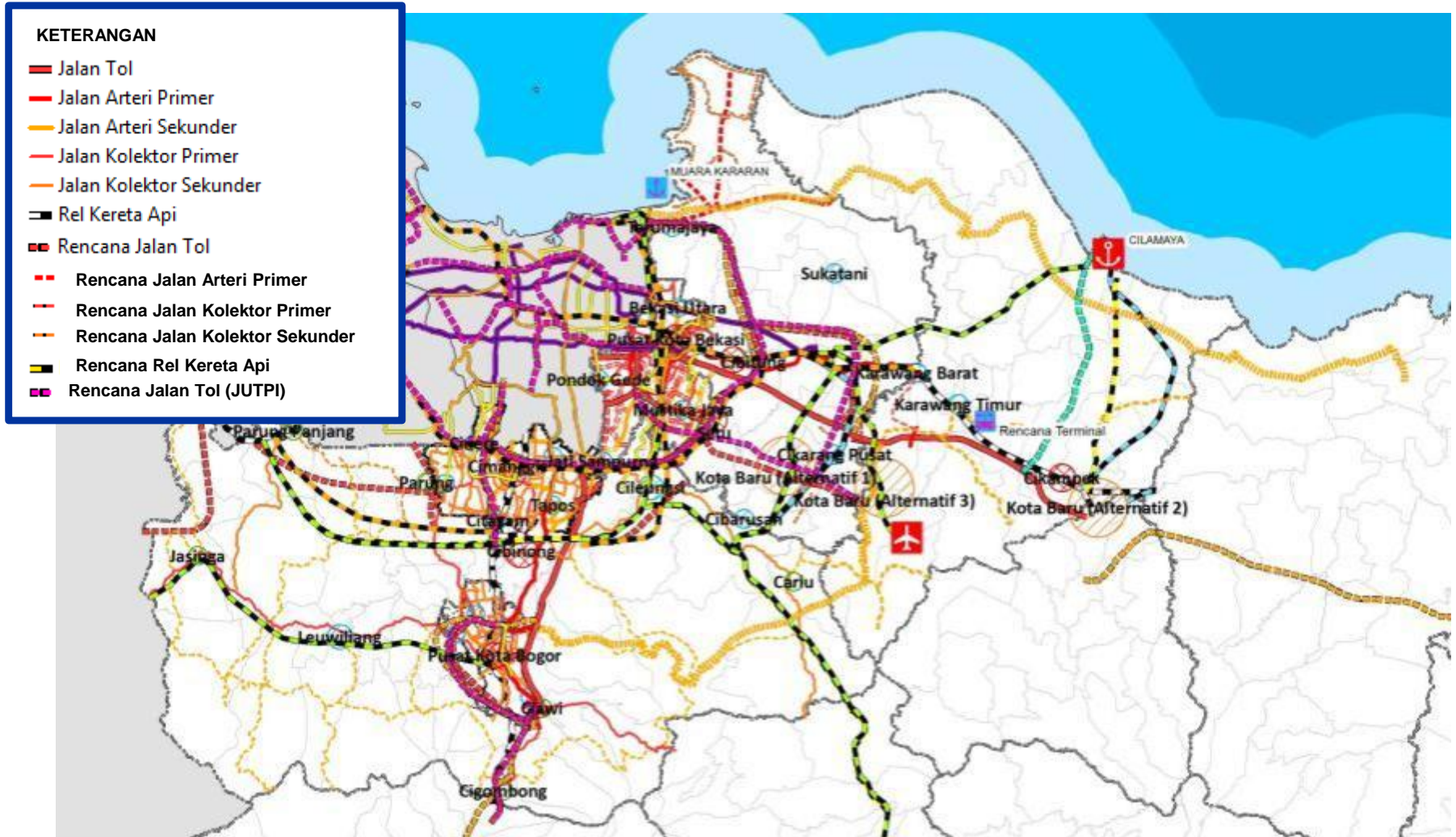
KETERANGAN

- Jalan Tol
- Jalan Arteri Primer
- Jalan Arteri Sekunder
- Jalan Kolektor Primer
- Jalan Kolektor Sekunder
- Rel Kereta Api
- Rencana Jalan Tol
- Rencana Jalan Arteri Primer
- Rencana Jalan Kolektor Primer
- Rencana Jalan Kolektor Sekunder
- Rencana Rel Kereta Api
- Rencana Jalan Tol (JUTPI)



Infrastructure Development Plan Metropolitan Bodebek Karpur

Based on Spatial Plan Kabupaten/Kota, Spatial Plan West Java Province, & Metropolitan Priority Area (MPA)



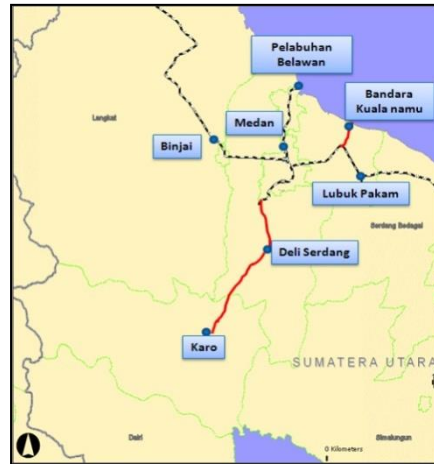
Initiative #1: Bus Rapid Transit

There are 14 cities that have implemented transit system in Indonesia

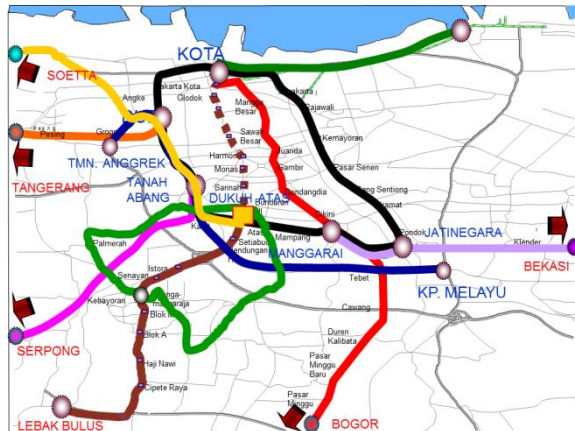


Initiative #2: Urban Railway Revitalization

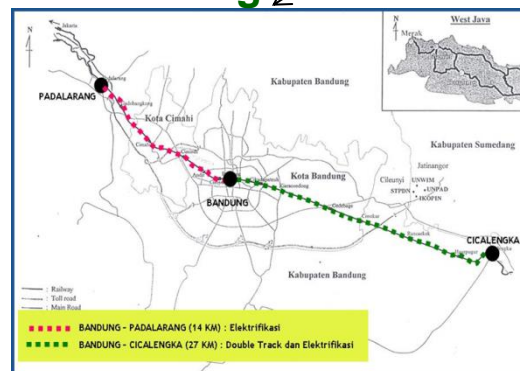
Medan



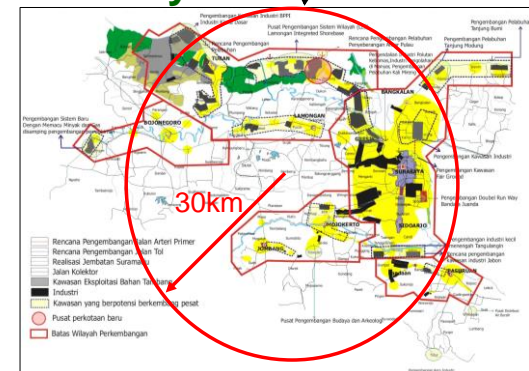
Jabodetabek



Bandung



Surabaya



Initiative #3: Gasification

GASIFICATION ON PUBLIC TRANSPORT



2007 – 2008

2575
Converter
Kits for
Taxis in
Jakarta.

2009

1667
Converter
Kits for
Para-
Transit in
Palembang
and Bogor .

2010

450
Converter
Kits for
Para-
Transit in
Surabaya.

2011

400
Converter
Kits for
Parantransit
in Jakarta.

Initiative #4: ITS

1. Optimization of traffic management (ATCS)



2. Electronic Toll Collection



3. Support for pedestrians



4. Support for public transport (BRT Priority)



Initiative #5: Encouragement of the use of non-motorized vehicles

1. Through infrastructure development:

- ❑ Development of pedestrian facilities, bike lanes, and facilities for disabled persons in DKI Jakarta, Bandung, Palembang, Pekanbaru and Balikpapan

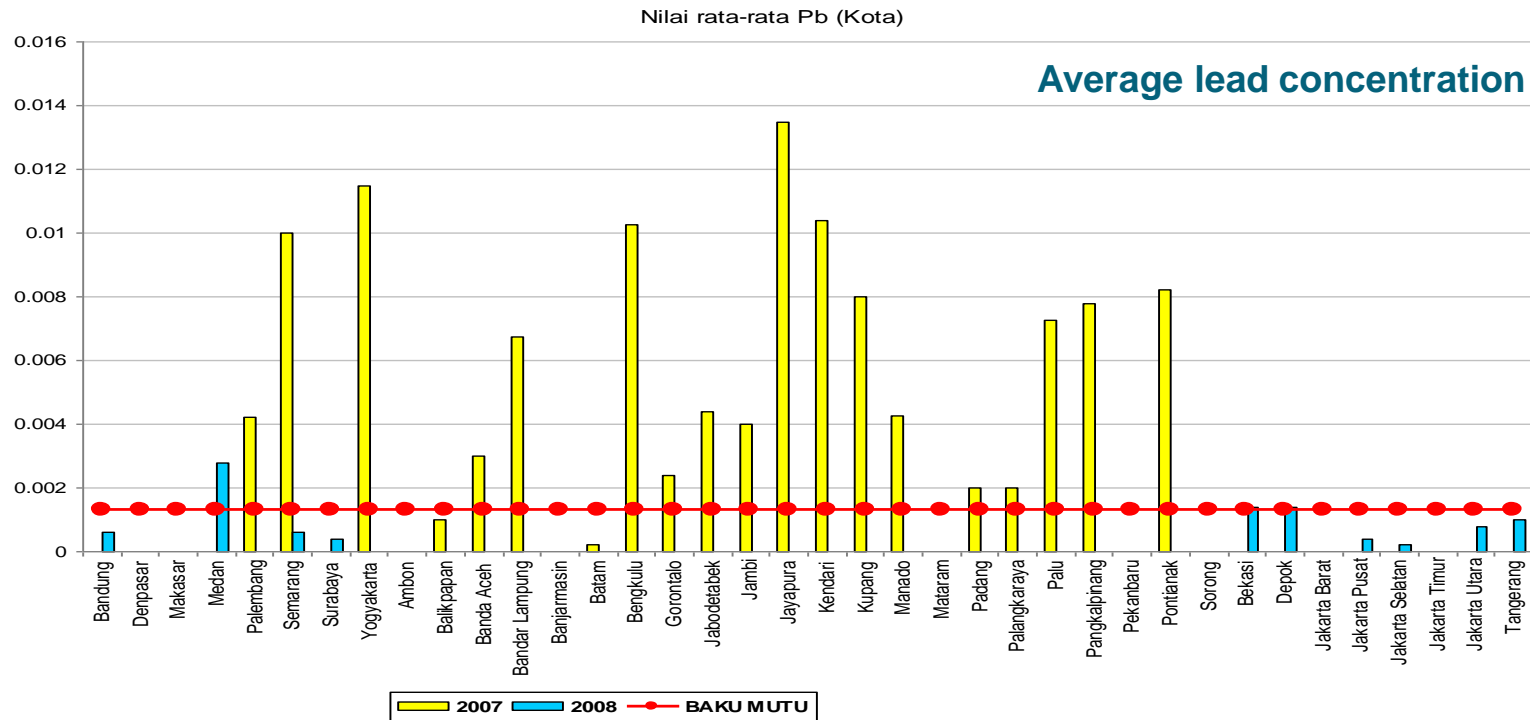


2. Through socialization to raise awareness of public transport. A few programs have been implemented:

- ❑ **Training on Smart Driving**
Target: public transport operator
Purpose: energy saving, safety and emission reduction.
- ❑ **Public Transportation Day**
First operation on Mei 2011.
Purpose: To encourage the using of public transport and to reduce the using of private car.
- ❑ **Socialization on Urban Transport Impact Handling**
Purpose: To encourage the implementation of Environmentally Sustainable Transport and to socialize Government Regulation on Traffic Impact Control and Transport Demand Management to the local government.

Initiative #6: Monitoring of Air Quality

Air quality, especially in roadsides, in 26 cities in Indonesia is currently being monitored



Since June 2006 leaded gasoline has been phased out in Indonesia. This will allow the use of after-treatment control technology for gasoline vehicles to meet Euro 2 emissions standards. According to the auto industry associations, 24% of new cars sold in Indonesia in 2006 met Euro 2 standards, while in 2007 all new gasoline vehicles and motorcycles sold in Indonesia complied with Euro 2 standards.