

# **Refleksi Satu Dekade Cetak Biru Sislognas: Rencana, Capaian, dan Agenda**

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# Outline

1. Logistics role for national economic development
2. Perpres 26/2012: revisit
3. Evaluation of Blueprint Sislognas Accomplishment
4. "New" Strategies and Programs for to Improve National Logistics Performance
5. National Logistic Objectives Achievement
6. Challenges & Opportunities
7. Conclusion and Recommendation

# Logistics role for national economic development

- Logistics is part of supply chains that **manages flows of goods, information, and money** through *procurement, warehousing, transportation, distribution, and delivery services* processes to **fulfil consumers expectation** regarding **quantity, quality, time, location, and price** from point to origin to point of destination in **safe, effective, and efficient** manners.
- Logistics functions as an **enabler** and **supporter** for a nation's economy to be **competitive, growing, and sustainable**.
- Empirical studies have demonstrated that there is a **close relationship** between **logistic performance and economic competitiveness** of a country

(Banister & Berechmann, 2001; Ekici, dkk., 2016; Munim & Schramm, 2018)

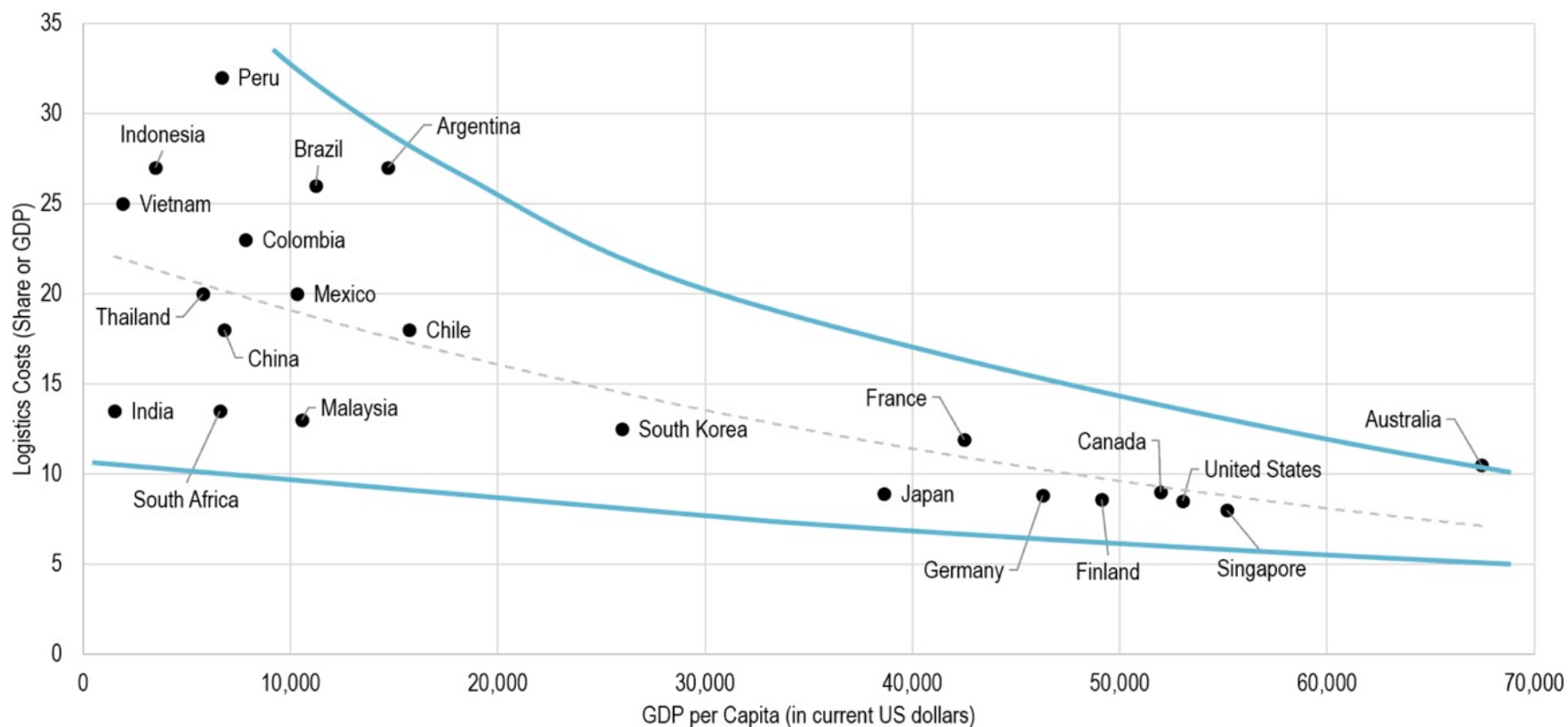
# Relationship between LPI dan Global Competitiveness Index (GCI)

- There is **strong correlation** ( $r = 0,91$ )\* between logistics performance index and global competitiveness index (GCI)
- The higher the LPI score of a country, the higher its competitiveness score

\*analysis by Puskalog ITB (2024)

| Country              | LPI 2018 |       | CGI 2019 |
|----------------------|----------|-------|----------|
|                      | Rank     | Score | Score    |
| Germany              | 1        | 4.2   | 81.8     |
| Sweden               | 2        | 4.05  | 81.2     |
| Belgium              | 3        | 4.04  | 76.4     |
| Austria              | 4        | 4.03  | 76.6     |
| Japan                | 5        | 4.03  | 82.3     |
| Netherlands          | 6        | 4.02  | 82.4     |
| Singapore            | 7        | 4     | 84.8     |
| Denmark              | 8        | 3.99  | 81.2     |
| United Kingdom       | 9        | 3.99  | 81.2     |
| Finland              | 10       | 3.97  | 80.2     |
| United Arab Emirates | 11       | 3.96  | 75       |
| Switzerland          | 13       | 3.9   | 82.3     |
| United States        | 14       | 3.89  | 83.7     |
| New Zealand          | 15       | 3.88  | 76.7     |
| France               | 16       | 3.84  | 78.8     |
| Spain                | 17       | 3.83  | 75.3     |
| Australia            | 18       | 3.75  | 78.7     |
| Italy                | 19       | 3.74  | 71.5     |
| Canada               | 20       | 3.73  | 79.6     |
| Norway               | 21       | 3.7   | 78.1     |

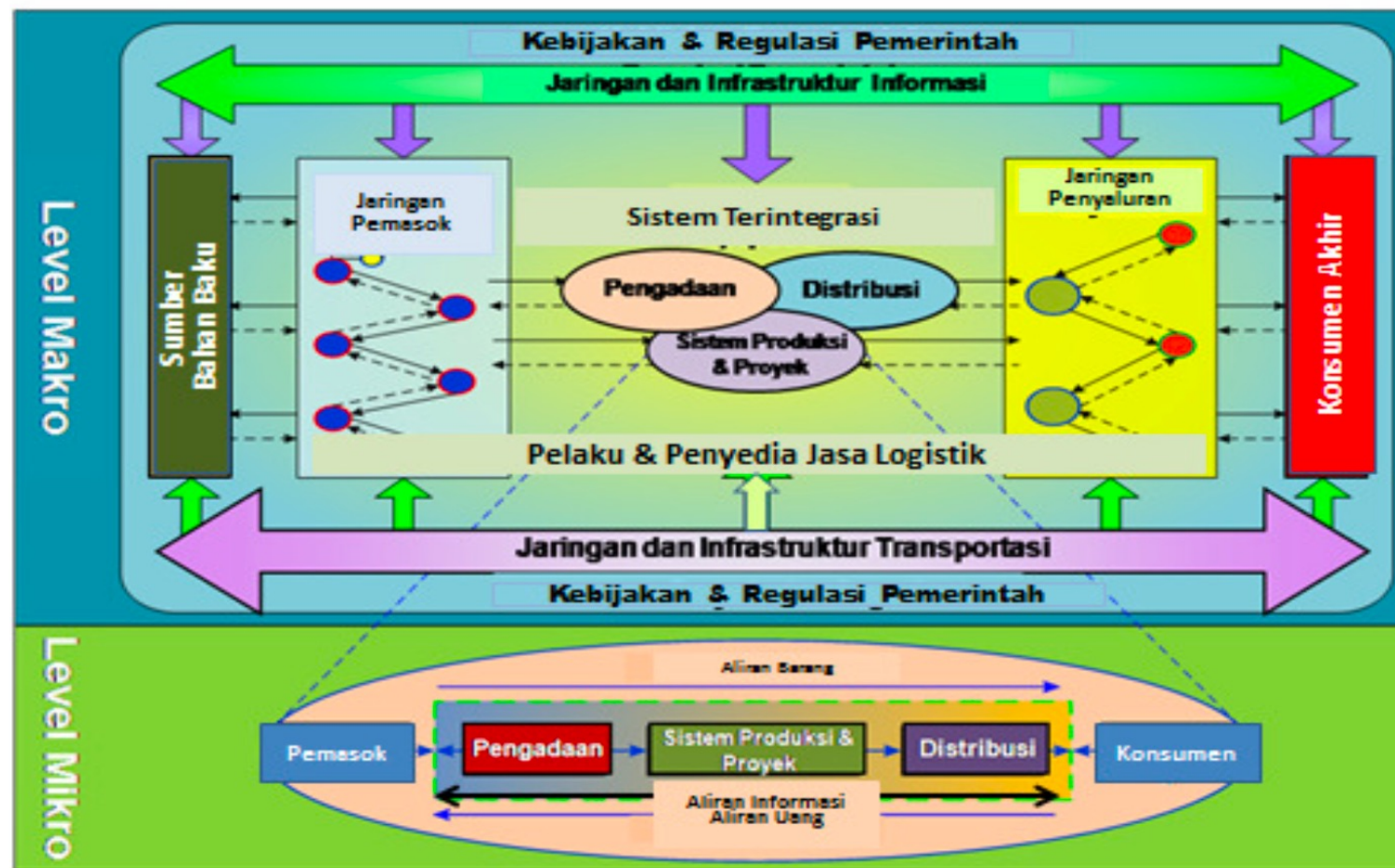
# Relationship between Logistic Cost and Per-capita GDP



\*Source: transportgeography.org

# Perpres 26/2012: revisit

National logistic system according to Perpres 26/2012



# Perpres 26/2012: revisit

- Indonesia logistics state in 2010 that motivated Perpres 26/2012:
  - LPI score 2,76 and ranked at 75 of 155 countries
  - Logistic cost: 27 % PDB



| Country            | LPI          |             |
|--------------------|--------------|-------------|
|                    | Rank         | Score       |
| <b>Tahun 2007</b>  |              |             |
| <b>Singapore</b>   | 1            | 4.19        |
| <b>Malaysia</b>    | 27           | 3.28        |
| <b>Thailand</b>    | 31           | 3.31        |
| <b>Indonesia</b>   | <b>43</b>    | <b>3.01</b> |
| <b>Vietnam</b>     | 53           | 2.89        |
| <b>Philippines</b> | 65           | 2.69        |
| <b>Tahun 2010</b>  |              |             |
| <b>Singapore</b>   | 2            | 4.09        |
| <b>Malaysia</b>    | 29           | 3.44        |
| <b>Thailand</b>    | 35           | 3.29        |
| <b>Philippines</b> | 44           | 3.14        |
| <b>Vietnam</b>     | 53           | 2.96        |
| <b>Indonesia</b>   | <b>75</b>    | <b>2.76</b> |
| <b>Growth</b>      | <b>↓ -32</b> |             |

# Perpres 26/2012: revisit

- Tujuan Cetak Biru:

“....**panduan dan pedoman dalam pengembangan Sistem Logistik Nasional....dan...alat untuk mengkomunikasikan** visi, misi, tujuan, arah kebijakan, dan strategi...Sislognas”

- Visi Sislognas 2025:

“Terwujudnya Sistem Logistik yang **terintegrasi secara lokal, terhubung secara global** untuk meningkatkan **daya saing nasional** dan **kesejahteraan rakyat** (*locally integrated, globally connected for national competitiveness and social welfare*)”

# Perpres 26/2012: revisit

Misi Sislognas:

- 1. Memperlancar arus barang** secara efektif dan efisien untuk menjamin **pemenuhan kebutuhan** dasar masyarakat dan **peningkatan daya saing** produk nasional di pasar domestik, regional, dan global.
- 2. Membangun simpul-simpul logistik nasional dan konektivitasnya** mulai dari pedesaan, perkotaan, antar wilayah dan antar pulau sampai dengan hub pelabuhan internasional melalui kolaborasi antar pemangku kepentingan.

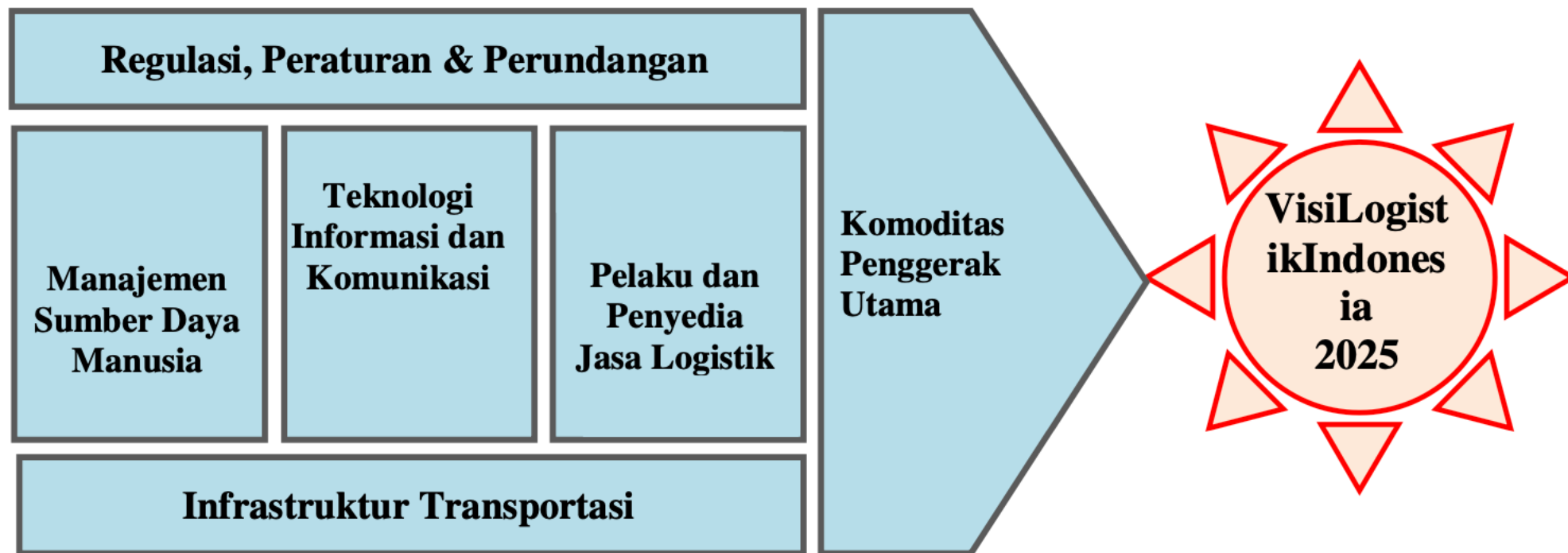
*Logistics Studies*

# Perpres 26/2012: revisit

Tujuan spesifik Sislognas:

- 1. Menurunkan biaya logistik**, memperlancar arus barang, dan meningkatkan pelayanan logistik sehingga meningkatkan daya saing produk nasional di pasar global dan pasar domestik;
- 2. Menjamin ketersediaan komoditas pokok dan strategis** di seluruh wilayah Indonesia dengan **harga yang terjangkau** sehingga mendorong pencapaian masyarakat adil dan makmur, dan memperkuat kedaulatan dan keutuhan NKRI;
- 3. Mempersiapkan diri** untuk menghadapi **integrasi jasa logistik ASEAN** pada tahun 2013 sebagai bagian dari pasar tunggal ASEAN tahun 2015 dan integrasi pasar global pada tahun 2020.

# Six Sislognas Drivers



Sumber: Perpres 26/2012

# Sislognas Strategies and Action Plans

## National logistics “Homework” (excerpt as an example)

Tabel 5.2. Rencana Aksi Infrastruktur

| Fokus/Bidang | Strategi                                                                                  | Rencana Aksi                                                                                                                                                      | Target Waktu | Penanggung Jawab | Instansi Terkait                                                                              | Prioritas |
|--------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------|-----------------------------------------------------------------------------------------------|-----------|
| 1. Pelayaran |                                                                                           |                                                                                                                                                                   |              |                  |                                                                                               |           |
| a. Pelabuhan | 1. Menyiapkan pelabuhan hub Internasional berdasarkan Komoditi dan Trayek Pelayaran Dunia | 1. Melakukan studi penentuan pelabuhan hub internasional di Kawasan Timur dan Barat Indonesia untuk mendukung efektivitas dan efisiensi kinerja logistik nasional | 2010-2011    | Kemenhub         | Kemen BUMN<br>Kemenko Ekon<br>Kemen PPN/-<br>Bappenas<br>Kemendag<br>Kemenperin<br>Kemen BUMN | 1         |
|              |                                                                                           | 2. Penataan ulang pelabuhan batu bara di Kalimantan                                                                                                               | 2011         | Kemenhub         | Kemenko EKon<br>Kemen.ESDM<br>Kemen BUMN                                                      | 2         |

Sumber: Perpres 26/2012

# How far the action plans are implemented?

Puskalog have traced the implementation status of action plans in Perpres 26/2012

Tabel 5.2. Rencana Aksi Infrastruktur

| Fokus/Bidang | Strategi                                                                                  | Rencana Aksi                                                                                                                                                      | Target Waktu | Penanggung Jawab | Instansi Terkait                                                                              | Prioritas | Status | Referensi                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------|-----------------------------------------------------------------------------------------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Pelayaran |                                                                                           |                                                                                                                                                                   |              |                  |                                                                                               |           |        |                                                                                                                                                                                                                                                                                                                                                                                                    |
| a. Pelabuhan | 1. Menyiapkan pelabuhan hub Internasional berdasarkan Komoditi dan Trayek Pelayaran Dunia | 1. Melakukan studi penentuan pelabuhan hub internasional di Kawasan Timur dan Barat Indonesia untuk mendukung efektivitas dan efisiensi kinerja logistik nasional | 2010-2011    | Kemenhub         | Kemen BUMN<br>Kemenko Ekon<br>Kemen PPN/-<br>Bappenas<br>Kemendag<br>Kemenperin<br>Kemen BUMN | 1         | 1      | <a href="https://ppid.dephub.go.id/fileupload/informasi-setiap-saat/VOLUME_31_NO_02_DESEMBER_2019.pdf">https://ppid.dephub.go.id/fileupload/informasi-setiap-saat/VOLUME_31_NO_02_DESEMBER_2019.pdf</a>                                                                                                                                                                                            |
|              |                                                                                           | 2. Penataan ulang pelabuhan batu bara di Kalimantan                                                                                                               | 2011         | Kemenhub         | Kemenko Ekon<br>Kemen. ESDM<br>Kemen BUMN                                                     | 2         | 1      | <a href="https://beritatrans.com/2015/03/05/200-pelabuhan-batubara-ditata-ulang/">https://beritatrans.com/2015/03/05/200-pelabuhan-batubara-ditata-ulang/</a>                                                                                                                                                                                                                                      |
|              |                                                                                           | 3. Membangun infrastruktur pendukung untuk pengembangan Pulau Laut di Kalimantan Selatan menjadi Pelabuhan Utama Batubara.                                        | 2011-2012    | Kemenhub         | Kemen. ESDM<br>Kemen BUMN                                                                     | 3         | 1      | <a href="https://diskominfo.mc.kalselprov.go.id/2023/06/06/pemprov-kalsel-upayakan-pembangunan-jembatan-penghubung-pulau-laut-ke-pulau-kalimantan/">https://diskominfo.mc.kalselprov.go.id/2023/06/06/pemprov-kalsel-upayakan-pembangunan-jembatan-penghubung-pulau-laut-ke-pulau-kalimantan/</a>                                                                                                  |
|              |                                                                                           | 4. Membangun infrastruktur pendukung untuk pengembangan pelabuhan, Dumai dan pelabuhan lain menjadi pelabuhan utama untuk komoditas berbasis <i>palm</i>          | 2010-2014    | Kemenhub         | Kemenko Ekon<br>Kemen PPN/-<br>Bappenas<br>Kemenperin<br>Kemen. BUMN<br>Kemendag<br>Kemen PU  | 3         | 1      | <a href="https://dephub.go.id/post/read/menhub-akan-kembangkan-pelabuhan-dumai-dan-pelabuhan-selat-lampa-natuna">https://dephub.go.id/post/read/menhub-akan-kembangkan-pelabuhan-dumai-dan-pelabuhan-selat-lampa-natuna</a><br><a href="https://infopublik.id/kategori/nusantara/401337/pelabuhan-dumai-akan-jadi-">https://infopublik.id/kategori/nusantara/401337/pelabuhan-dumai-akan-jadi-</a> |
|              |                                                                                           | 5. Menyiapkan pelabuhan utama ( <i>deep water port</i> ) yang baru sehingga penanganan impor dan ekspor Indonesia dapat dilakukan                                 | Mulai 2011   | Kemenhub         | Kemenko Ekon<br>Kemen PPN/-<br>Bappenas<br>Kemen BUMN                                         | 2         | 2      | <a href="https://ppid.dephub.go.id/fileupload/informasi-berkala/20230522114420.LKIP_DI_RJEN_TAHUN_2022.pdf">https://ppid.dephub.go.id/fileupload/informasi-berkala/20230522114420.LKIP_DI_RJEN_TAHUN_2022.pdf</a>                                                                                                                                                                                  |

Status:

1. Finished
2. Started but no information on the finished status
3. No information can be obtained

# Sislognas Action Plans Completion Rate

| Group of Action Plan          | Amount of plans | Completed | Started but not fully completed | No information |
|-------------------------------|-----------------|-----------|---------------------------------|----------------|
| Commodities                   | 15              | 53%       | 47%                             | 0%             |
| Infrastructures               | 65              | 49%       | 26%                             | 25%            |
| Information technology        | 8               | 63%       | 13%                             | 25%            |
| Logistic service provider     | 5               | 60%       | 0%                              | 40%            |
| Human resource and management | 13              | 46%       | 23%                             | 31%            |
| Regulation                    | 25              | 40%       | 8%                              | 52%            |
| Governance                    | 3               | 0%        | 67%                             | 33%            |

Source: Puskalog assesment (2024)

# ”New” Strategies and Programs for to Improve National Logistics Performance

In the last ten years, there have been strategies and programs that are not explicitly mentioned in Perpres 26/2012, but share the same objectives, including:

- Program Tol laut
- Paket Kebijakan Ekonomi XV, including Perpres 44/2018 (INSW)
- Inpres 5/2020 (National Logistic Ecosystem)
- Massive development of transport infrastructure (new highways, ports, airports)

# Logistic Performance Index 2023 vs 2018

| Country     | LPI  |       | Customs |       | Infrastructure |       | International Shipments |       | Logistics Competence |       | Tracking & Tracing |       | Timeliness |       |
|-------------|------|-------|---------|-------|----------------|-------|-------------------------|-------|----------------------|-------|--------------------|-------|------------|-------|
|             | Rank | Score | Rank    | Score | Rank           | Score | Rank                    | Score | Rank                 | Score | Rank               | Score | Rank       | Score |
| <b>2018</b> |      |       |         |       |                |       |                         |       |                      |       |                    |       |            |       |
| Singapore   | 7    | 4     | 6       | 3.89  | 6              | 4.06  | 15                      | 3.58  | 3                    | 4.1   | 8                  | 4.08  | 6          | 4.32  |
| Thailand    | 32   | 3.41  | 36      | 3.14  | 41             | 3.14  | 25                      | 3.46  | 32                   | 3.41  | 33                 | 3.47  | 28         | 3.81  |
| Malaysia    | 41   | 3.22  | 43      | 2.9   | 40             | 3.15  | 32                      | 3.35  | 36                   | 3.3   | 47                 | 3.15  | 53         | 3.46  |
| Indonesia   | 46   | 3.15  | 62      | 2.67  | 54             | 2.89  | 42                      | 3.23  | 44                   | 3.1   | 39                 | 3.3   | 41         | 3.67  |
| Philippines | 60   | 2.9   | 85      | 2.53  | 67             | 2.73  | 37                      | 3.29  | 69                   | 2.78  | 57                 | 3.06  | 100        | 2.98  |
| <b>2023</b> |      |       |         |       |                |       |                         |       |                      |       |                    |       |            |       |
| Singapore   | 1    | 4.3   | 1       | 4.2   | 1              | 4.6   | 2                       | 4     | 1                    | 4.4   | 1                  | 4.4   | 1          | 4.3   |
| Thailand    | 34   | 3.5   | 31      | 3.3   | 25             | 3.7   | 22                      | 3.5   | 38                   | 3.5   | 34                 | 3.6   | 46         | 3.5   |
| Malaysia    | 26   | 3.6   | 31      | 3.3   | 30             | 3.6   | 8                       | 3.7   | 28                   | 3.7   | 29                 | 3.7   | 30         | 3.7   |
| Indonesia   | 61   | 3     | 59      | 2.8   | 59             | 2.9   | 57                      | 3     | 65                   | 2.9   | 65                 | 3     | 59         | 3.3   |
| Philippines | 43   | 3.3   | 59      | 2.8   | 47             | 3.2   | 47                      | 3.1   | 46                   | 3.3   | 49                 | 3.3   | 21         | 3.9   |

To note: Indonesia's LPI score does not fully capture the improvement of Indonesia's logistic sector, since LPI focuses more on interborder or international logistics, while Indonesia has significant intraborder or domestic logistic problems.

# National Logistic Objectives Achievement

## Objective 1: National logistic cost

- Actual in year 2023: 14.29% of GDP (according to Bappenas & BPS calculation)
- Target according to Perpres 26/2012 in 2025: 12.4% of GDP
- Target according to Indonesia Emas 2045: 9% of GDP

## Objective 2: Basic and strategic commodities

- **Scarcities** still happens in certain location in certain time
- **Price variability** between location and between time of the year\*
  - Red chilli pepper price discrepancy among provinces: 440 percent
  - Red chilli pepper price discrepancy in Kota Bandung during 2024: 209 percent

\*data PIHPS 24 Juli 2024

# National Logistic Objectives Achievement

## Objective 3: To be prepared for ASEAN market integration

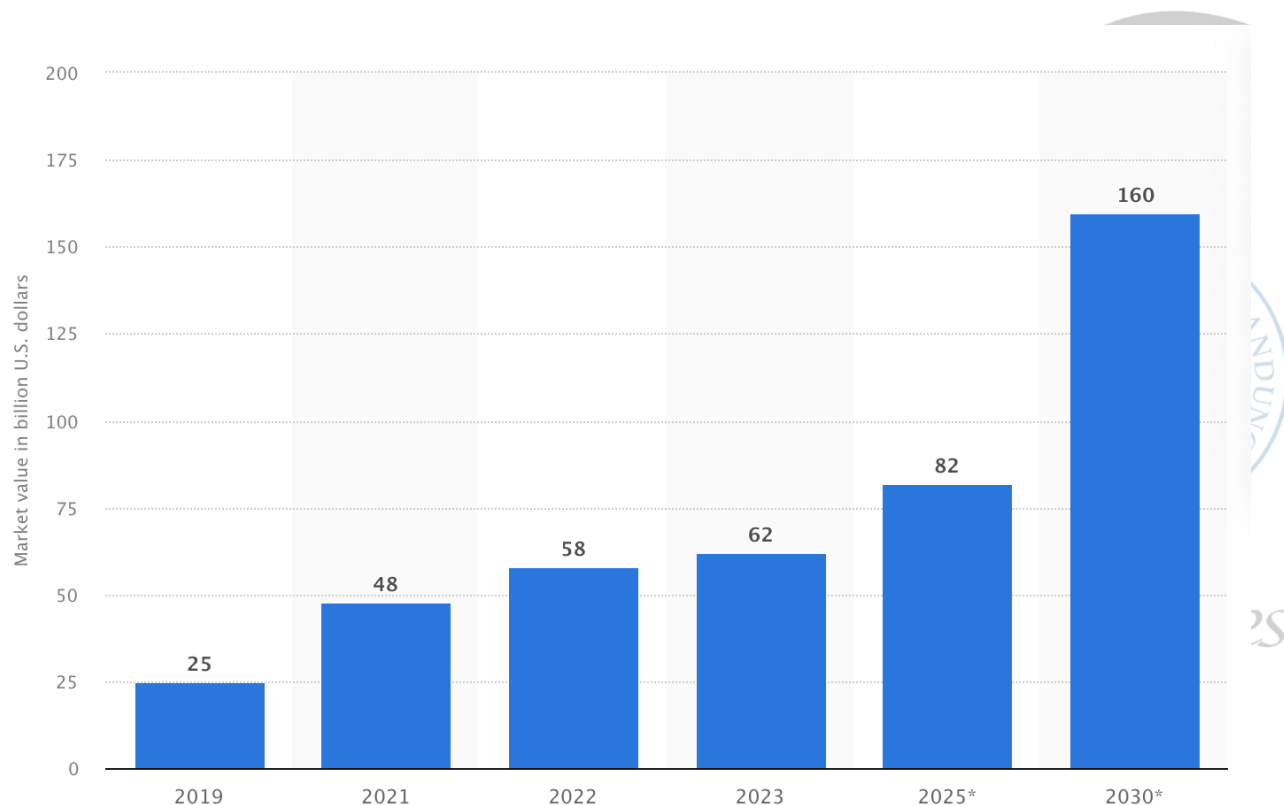
| Country     | LPI  |       | Customs |       | Infrastructure |       | International Shipments |       | Logistics Competence |       | Tracking & Tracing |       | Timeliness |       |
|-------------|------|-------|---------|-------|----------------|-------|-------------------------|-------|----------------------|-------|--------------------|-------|------------|-------|
|             | Rank | Score | Rank    | Score | Rank           | Score | Rank                    | Score | Rank                 | Score | Rank               | Score | Rank       | Score |
| 2023        |      |       |         |       |                |       |                         |       |                      |       |                    |       |            |       |
| Singapore   | 1    | 4.3   | 1       | 4.2   | 1              | 4.6   | 2                       | 4     | 1                    | 4.4   | 1                  | 4.4   | 1          | 4.3   |
| Malaysia    | 26   | 3.6   | 31      | 3.3   | 30             | 3.6   | 8                       | 3.7   | 28                   | 3.7   | 29                 | 3.7   | 30         | 3.7   |
| Thailand    | 34   | 3.5   | 31      | 3.3   | 25             | 3.7   | 22                      | 3.5   | 38                   | 3.5   | 34                 | 3.6   | 46         | 3.5   |
| Philippines | 43   | 3.3   | 59      | 2.8   | 47             | 3.2   | 47                      | 3.1   | 46                   | 3.3   | 49                 | 3.3   | 21         | 3.9   |
| Vietnam     | 43   | 3.3   | 43      | 3.1   | 47             | 3.2   | 38                      | 3.3   | 53                   | 3.2   | 41                 | 3.4   | 59         | 3.3   |
| Indonesia   | 61   | 3     | 59      | 2.8   | 59             | 2.9   | 57                      | 3     | 65                   | 2.9   | 65                 | 3     | 59         | 3.3   |
| Cambodia    | 115  | 2.4   | 110     | 2.2   | 125            | 2.1   | 121                     | 2.3   | 110                  | 2.4   | 80                 | 2.8   | 109        | 2.7   |
| Lao PDR     | 115  | 2.4   | 101     | 2.3   | 108            | 2.3   | 121                     | 2.3   | 110                  | 2.4   | 105                | 2.4   | 101        | 2.8   |

*Logistics Studies*

Indonesia's LPI is among the lowest in SEA, hence it is not competitive among SEA countries

## Challenges & Opportunities:

# E-commerce Gross Merchandise Value is growing fast

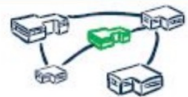


Indonesia's E-commerce GMV had almost tripled between 2019 and 2023

It is expected to continue growing fast and again almost tripled between 2023 and 2030

Source: Statista, 2024

# Challenges & Opportunities: Logistics Technologies is Developing Fast

| Industry 4.0                  |                                                                                                                                |                                                                                                                                |                                                                                                                                       |                                                                                                                                        |                                                                                                                                                  |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Logistics                     |                                                                                                                                |                                                                                                                                |                                                                                                                                       |                                                                                                                                        |                                                                                                                                                  |
| Supply Chain Logistics        | <br>Local Operating Structure                 | <br>Global Operations Structure             | <br>Partial Global Resource Planning / Controlling | <br>Complete Global Resource Planning / Controlling | <br>Open and Flexible Operations Footprint                    |
| Inbound Logistics             | <br>Push Delivery Process                     | <br>Pull Delivery Process / JIS             | <br>Vendor Managed Inventory                       | <br>Autonomous Inventory Management                 | <br>Predictive Inbound Logistics Management (Big Data)        |
| Warehouse Management          | <br>No Automation                             | <br>Automatic Warehouse System              | <br>Automatic Warehouse Network                    | <br>Supply Chain Warehouse Network                  | <br>No Warehouse in Supply Chain                              |
| Intralogistics / Line Feeding | <br>Manually steered rack, trolley            | <br>Manually steered train                  | <br>Autonomous FTS on fixed routes                 | <br>Autonomous FTS on open area                     | <br>Autonomous FTS on open area steered by production machine |
| Outbound Logistics            | <br>Push Delivery Process                   | <br>Order-Based Delivery Management       | <br>Active Delivery Management                   | <br>Automatic Delivery Management                 | <br>Predictive Delivery Management                          |
| Logistics Routing             | <br>Decentralized Vehicle / Equipment Fleet | <br>Centralized Vehicle / Equipment Fleet | <br>Pre-planned and Centralized Fleet            | <br>Real-Time Routing and Connected Navigation    | <br>Autonomous Transportation Vehicle / Equipment           |

# Challenges & Opportunities: Green and climate change concerns

- “IMO 2020”: limits the sulphur in the fuel oil
- The 2023 IMO GHG Strategy: to reach net-zero GHG emissions from international shipping
- Indonesia newest Nationally Determined Contribution (NDC) targets emission reduction to 31,89% in 2030.
  - In 2019, 27 percent Indonesia emission came from transport sector\*
  - Keputusan Menteri Perhubungan Republik Indonesia Nomor 8 Tahun 2023: Tentang Penetapan Aksi Mitigasi Perubahan Iklim Sektor Transportasi Untuk Pencapaian Target Kontribusi Yang Ditetapkan Secara Nasional

\*Climate transparency (2020)

# Conclusion

- National logistics systems objectives as stated in Perpres 26/2012 are still not fully accomplished, but is still relevant to achieved
- However, some adjustments should be made because of :
  1. Some targets in Sislognas action plan has been finished, both from original action plan in Perpres 26/2012 and from new programs that had similar objectives
  2. There has been changes in goals and priorities of RPJMN, compared to 10 years ago
  3. New trends, situations, dan challenges, nationally and globally

# Recommendation

1. The spirit of national logistic system blueprint needs rejuvenation by **revising Perpres 26/2012 by adjusting** it to **current achievement** as well as new and future **challenges, opportunities**, as well as **national and global strategic issues**.
2. A **system and instruments for measuring national logistics performance should be developed**. These instruments cover both **factual metrics** (for example national logistic cost) as well as **perception-based metrics** (similar to LPI). These instruments should provide **objective** performance metrics that can be used **to determine current level of achievement** and **to direct future strategies and initiatives** in order to achieve national logistics objectives.



Terima kasih

*Logistics Studies*