



East Coast Rail Link (ECRL): Value-adding Disruptor for National Logistics

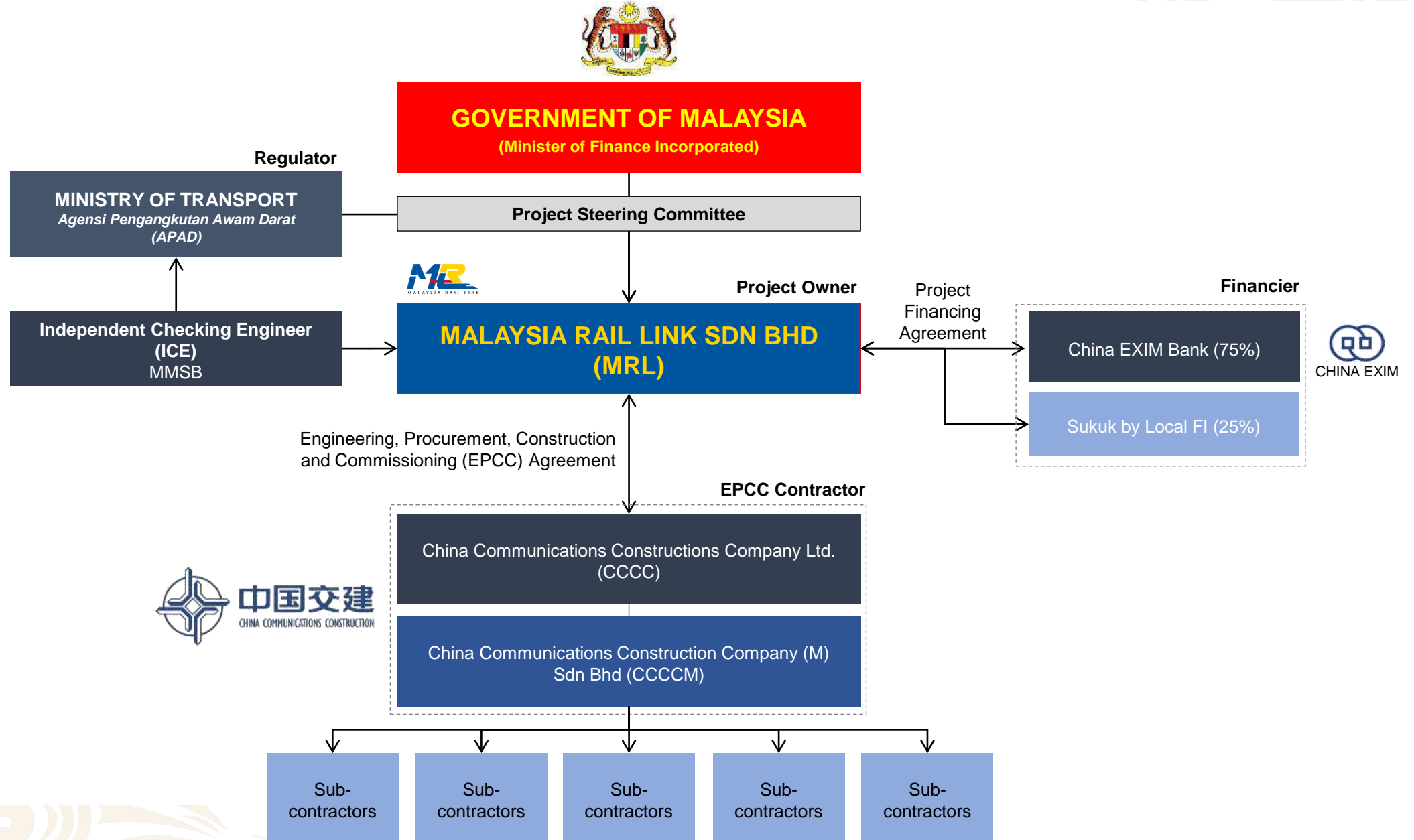
8th of March 2024
Malaysia Rail Link Sdn Bhd



A decorative floral pattern in the bottom-left corner, featuring stylized leaves and circular motifs in a light gray color.

Introduction to ECRL

Project Management Structure



Alignments & Stations

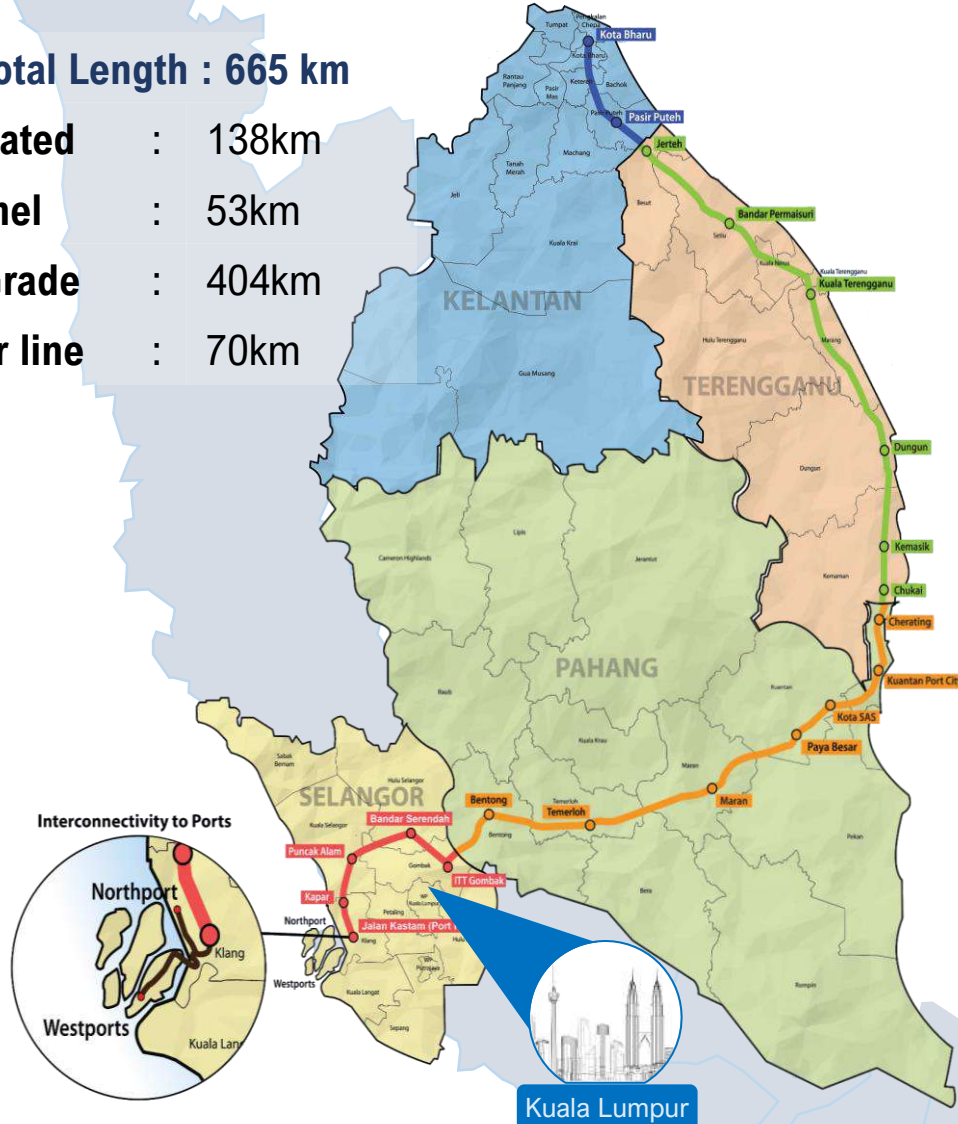
Total Length : 665 km

Elevated : 138km

Tunnel : 53km

At-Grade : 404km

Spur line : 70km



KELANTAN
(2 Stations)

TERENGGANU
(6 Stations)

PAHANG
(7 Stations)

SELANGOR
(5 Stations)

SECTION A
(Kota Bharu – Dungun)
210km

SECTION B
(Dungun – Mentakab)
210km + 41km

SECTION C
(Mentakab – Port Klang)
172km + 32km

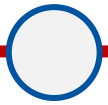


LEGEND:

- Interchange Station**
- Dual Track**

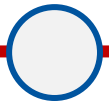
Highlights & Snapshots

2017



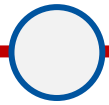
Ground breaking at Kota SAS, Pahang

2018



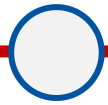
Ground breaking at Tunjong, Kelantan

2019



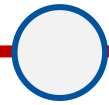
Launching at Bukit Bauk, Terengganu

2021



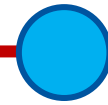
Tunnel breakthrough at Terowong Paka, Terengganu

2022



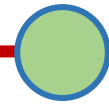
Tunnel Breakthrough at Terowong Genting, Pahang

2024



62.4% completion to date

Jan 2027



Kota Bharu to ITT Gombak Operation

Jan 2028



Overall Project Completion

665km
length of alignment

Main length **592km**
Spurline length **48km**
Westports & Northport **25km**

160km/h
Passenger train
80km/h
Freight train

Direct connection to **Port Klang**
(Westports & Northport)

Progress on **track and on schedule**

Track width - **Standard Gauge**
(1.435m)

Fully electrified
(25,000v)

Passenger Train



Axle model	Length	Width
Centralised Power	153m	3.3m
Operating speed	160km/h	
Seating capacity	440	

Cargo Train



Axle model	Length	Width
C0-C0	22.5m	3.1m
Design speed	80km/h	
Axle load	25T	
Traction tonnage	3,500T	

Container flat-bed wagons



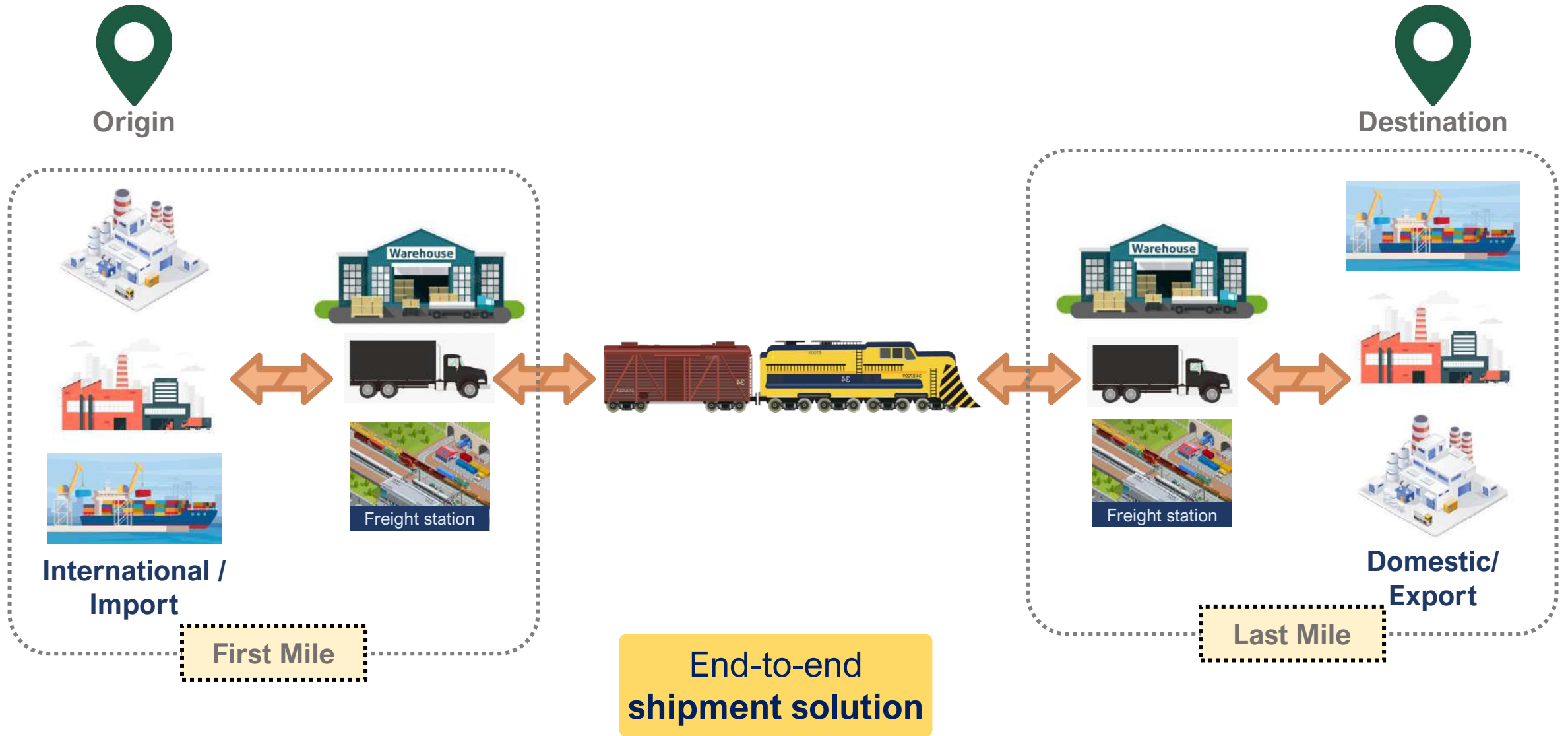
Open-top Box wagons



Box Car wagons



ECRL's Sequence of Multi-modal Transportation



Kota Bharu to ITT Gombak

Year	Total CO2e Emission Avoided (MT/Annum)				Total Avoided (MT/Annum)	Total CO2e Emission Generated (MT/Annum)		Total Generated (MT/Annum)	Net CO2e Emission Avoided (MT CO2e/Annum)
	Car	Bus	Air	Trucks		Passenger Train	Freight Train		
2024	109,450	4,533	25,534	186,927	326,443	48,714	18,016	66,730	259,713
2030	226,293	8,907	54,571	558,548	848,319	101,303	54,343	155,646	692,673
2040	374,159	18,519	71,752	693,433	1,157,863	162,820	66,553	229,372	928,490

ITT Gombak to Port Klang

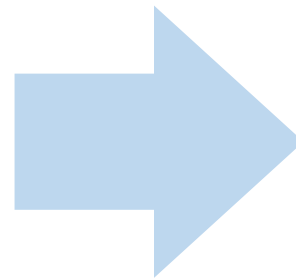
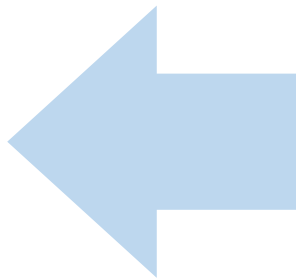
Year	Total CO2e Emission Avoided (MT/Annum)				Total Avoided (MT/Annum)	Total CO2e Emission Generated (MT/Annum)		Total Generated (MT/Annum)	Net CO2e Emission Avoided (MT CO2e/Annum)
	Car	Bus	Rail (KTMB)	Trucks		Passenger Train	Freight Train		
2025	1,908	12	154	80,260	82,334	817	6,877	7,694	74,640
2035	2,257	15	183	138,937	141,392	968	11,807	12,775	128,617
2045	2,703	17	215	219,887	222,822	1,138	18,836	19,974	202,848

A decorative floral pattern in the bottom-left corner, featuring stylized, swirling, and leaf-like motifs in a light gray color.

ECRL Regional Connectivity

Connections and Connectivity

North America, & EU



East Malaysia, China, & APAC

LEGEND:

- Interchange Station
- ECRL
- KTMB
- Sea Port

- This Intermodal transportation collaboration initiatives involves the seamless movement of goods facilitated by ECRL.
- It enables transportation of manufactured goods from Klang Valley to be shipped to East Malaysia (Sabah & Sarawak).
- The initiative involves rail and sea port operator, Kuantan Port Consortium, ensuring the seamless flow of goods to their intended destinations.
- Currently, the demand for shipping automotive products to East Malaysia (Sabah & Sarawak)



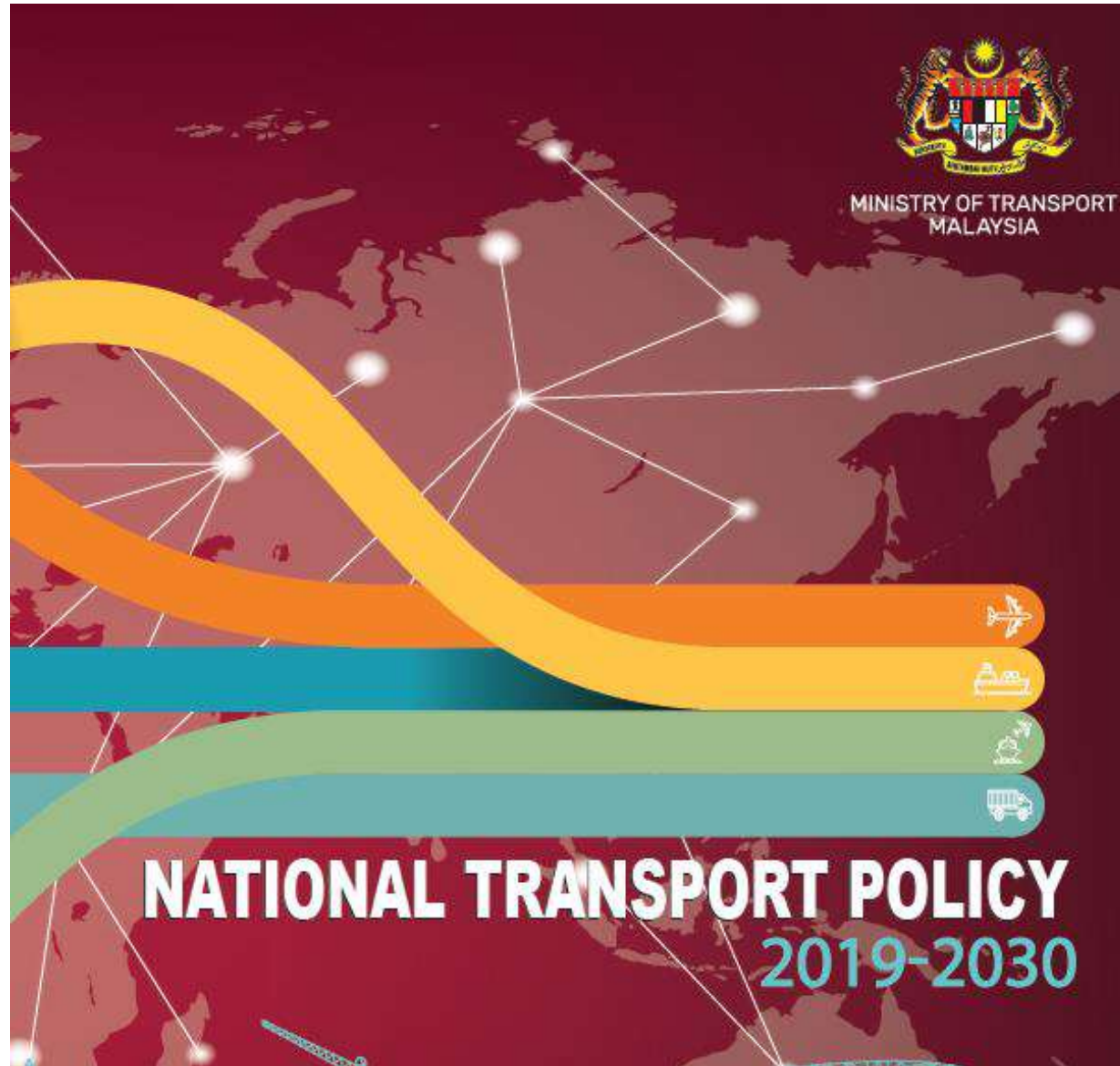
ECRL Extension from Kota Bharu (KB) to Rantau Panjang & KTMB Track Re-Opening from Pasir Mas to Rantau Panjang



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ECRL Corridor Development

National Transport Policy



INCREASE THE UTILISATION OF RAIL SERVICE FOR PASSENGERS AND GOODS

The current movement of goods by rail is only 30% of total railway track capacity, and less than 5% of land freight is transported by rail. Therefore, there is untapped potential for using rail to transport goods, especially for dangerous and hazardous materials. Globally, rail transportation of hazardous materials is recognised to be the safest method of moving large quantities of chemicals over long distances. Similarly, there is additional capacity on the existing KTM Komuter and intercity rail services which have the potential to be utilised.

Enhance road-rail intermodal connectivity to promote modal shift from road to rail

Objectives:

- Encourage modal shift of freight from road to rail
- Optimise the use of existing rail infrastructure and assets
- Reduce greenhouse gas emission and road congestion
- Reduce number of heavy vehicles on roads

STRATEGY 4.3




ACCELERATE IMPLEMENTATION OF LOW CARBON MOBILITY INITIATIVES

Mobility, in particular private transportation, has traditionally been viewed as carbon intensive with significant efforts focused in mitigating fuel consumption and carbon emissions. Private transportation has led the way in developing low carbon alternatives such as hybrid and all electric vehicles, this in turn has spread to the commercial sector. Future policies take into account the need to increase the adoption rate of low carbon initiatives as well as planning for future infrastructure to minimise unsustainable consumption patterns.

Objectives:

- Reduce greenhouse gas (GHG) emission from transport sectors
- Increase adoption of energy efficient vehicles (EEVs) as a preferred mode of transport
- Increase utilisation of public transport and non-motorised transport

Maximizing the utilization of the ECRL rail service through a three-pronged strategy

Strategy	Description	Impact	Initiatives	Stakeholders
 <p>Promote Modal Shift to Rail</p>	<p>Encourage the shift from existing mode of transport to rail transportation.</p>	<p>26 million mtpa for freight/cargo and 5 million per annum of passenger by 2030</p>	<ul style="list-style-type: none"> Commercial agreements Marketing & promotion Govt Policy changes 	<ul style="list-style-type: none"> MRL-CCCC (OpCo) Multimodal operators (ie. Sea ports, logistic hubs, etc) Logistics companies
 <p>Maximize Occupancy of Existing Industrial Parks</p>	<p>Increase and maximize the occupancy rate of existing industrial parks along ECRL corridor</p>	<ul style="list-style-type: none"> Current average occupancy rate is between 40% - 60%. Increase occupancy rate to 100%. 	<ul style="list-style-type: none"> Trade missions Investment promotion and awareness Tax incentives 	<ul style="list-style-type: none"> MITI ECERDC MIDA State Government MRL
 <p>New Development in Industrial, Commercial and Residential</p>	<p>Promote development of new development along ECRL corridor pivoting on sustainable heavy industries through EAPs.</p>	<ul style="list-style-type: none"> Industrial Parks/ Logistics hubs Hi-Tech Parks Transit-oriented development (TOD) 	<ul style="list-style-type: none"> ECRL Corridor Land Use Masterplan (Plan Malaysia) Develop low carbon emission supply chain (ie. Bursa Carbon Exchange) 	<ul style="list-style-type: none"> MITI ECERDC MIDA State Government MRL

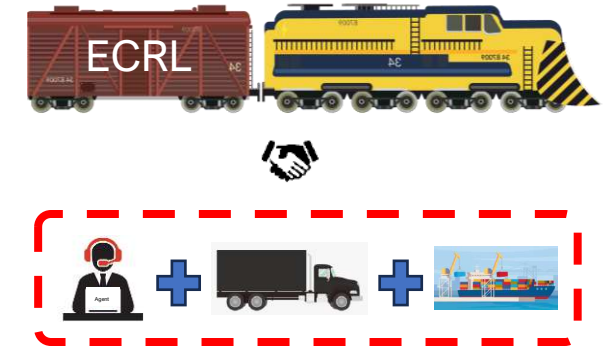
Request of Information (RFI) – Collaborative Business Proposals ECRL Freight Service

Objective

To identify strategic collaborative partners and freight forwarders; facilitating modal shift from road to rail

Timeline

No.	Month	Activities
1.	January 2024	<ul style="list-style-type: none"> RFI Advertisement RFI Document Issuance
2.	February 2024	<ul style="list-style-type: none"> FMFF Briefing
3.	March 2024	<ul style="list-style-type: none"> RFI's deadline submission

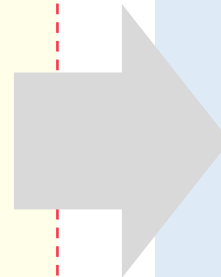


Registration

- As of 29th February 2024, the companies expressing interest in the RFI Exercise is **66 companies**.

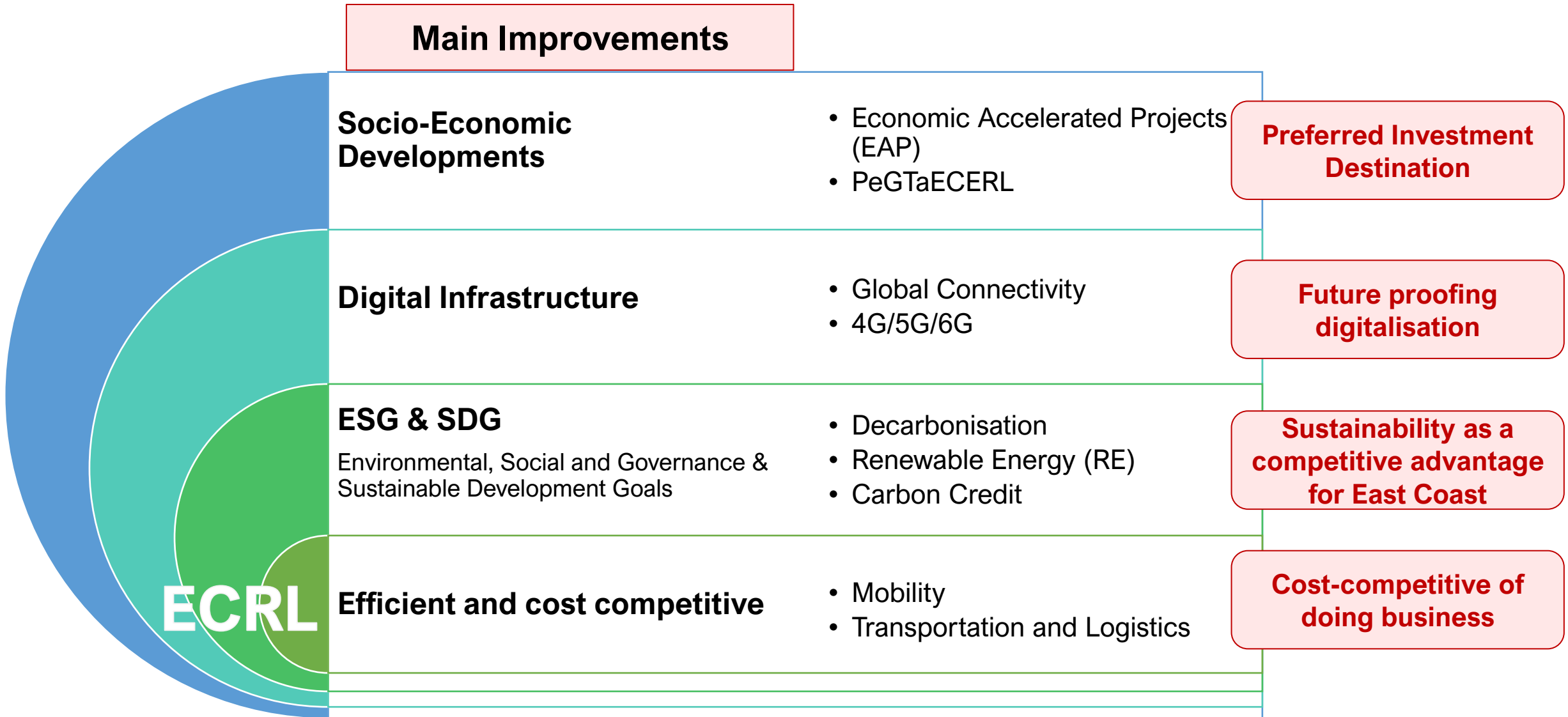
Deadline

- The original deadline for RFI submission was on 26th February 2024 and has been extended to **11th March 2024** due to the overwhelming response.



RFI's Outcome

- Hoping to develop a list of freight forwarding and logistics companies, registered **to collaborate with MRLSB to develop a new solution on rail transport for various cargoes along ECRL corridor**
- To **capture customers** with lower volume and shorter distance **by enabling cargo consolidation and aggregation.**



Thank You

For enquiries, kindly contact:

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