



Kementerian Perhubungan  
Republik Indonesia

# UKPACT Low Carbon Transport Audiensi dengan PPTB

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30 April 2025

**UKPACT**



WRI INDONESIA



# Agenda



# Today's Agenda

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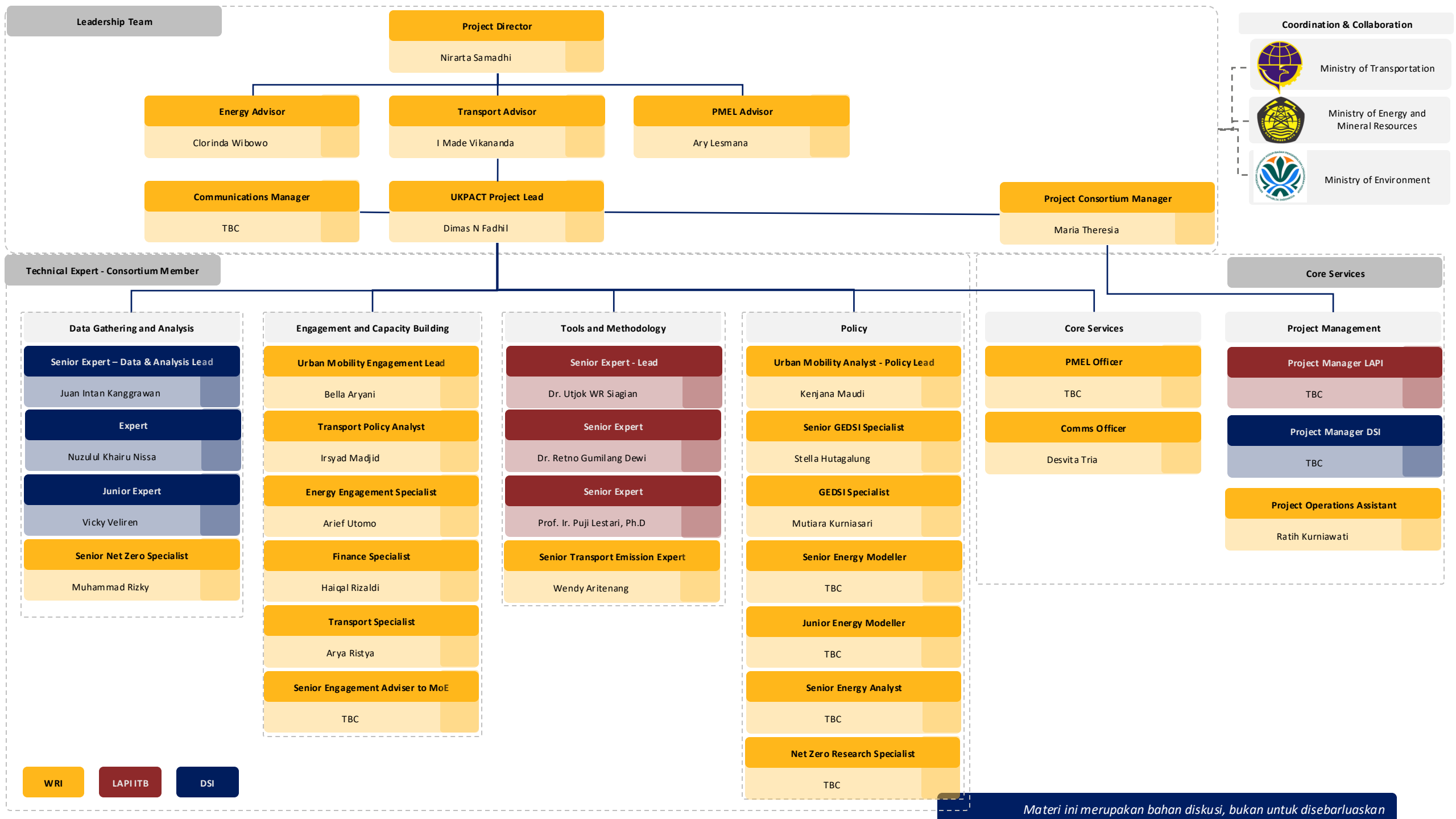
**1** Introduction

**2** Progress Update

**3** Workplan

# Introduction





# UK PACT PHASE 2 IMPLEMENTING PARTNER

## Energy Efficiency



## Low-carbon Transport



Advancing the MRV System for Emission Inventory and Mitigation Actions to Accelerate Transport Decarbonization



Regional and National Energy Efficiency Programme for Accelerated GHG Reduction



Building Towards Sustainable Energy Investment in Municipalities (BERSAMA): Energy efficiency & decarbonisation roadmaps



## Energy Efficiency

Transforming Energy Efficiency Networks and Green Acceleration through Investment (TENAGA-i)



Energy Savings Insurance (ESI) in Indonesia



Towards a Green Rail Future: Integrating Decarbonisation into Indonesia's National Rail Strategy



Implementation of Integrated Transit and Development Model in the Railway Sector of Indonesia's Cities





## Low-carbon transport

*Powered by UK PACT*

*(Partnering for Accelerated Climate Transitions)*

Advancing MRV System for Emission Inventory and Mitigation Actions to accelerate Transport Decarbonization in Indonesia

*A project led by WRI Indonesia*

## Project Summary

Accelerating Transport Decarbonization in Indonesia through evidence-based policies and comprehensive roadmap built upon a robust and integrated MRV systems

**Project Period**  
**2025 - 2026**

## Expected Outcome & Impact

By 2030, Indonesia's transport sector contributes 5% to meet enhanced NDC targets and align with the National Long-term Plan 2045, through the implementation of climate-driven transportation policies that are measurable, inclusive, and data-driven.

### Key Areas

- 01** Integrated Emission Inventory and MRV Systems for Road, Rail, Maritime, and Aviation Sub-sectors in Indonesia
- 02** National and Sub-National Capacity Building
- 03** NDC and Energy Transition Roadmap for Transport Sector in Indonesia

Lead organisation:



Consortium members:



# Progress Update



# Progress

## UKPACT Phase 1 Activities



Audience with Head of Legal Bureau – MoT



GHG Task Force Capacity Building



1 on 1 Meeting with SubSectors (Land, Rail, Air)



GHG Task Force Kick Off



FGD on Railway Emission Inventory



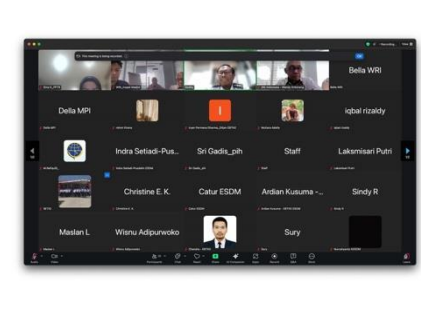
Meeting with PPTB on System Dynamics Method



Emission Inventory Workshop with MoT



National Workshop on Transport Decarbonization Roadmap



Interministerial Meeting on Transport Decarbonization Roadmap



MoT Internal Meeting on Transport Decarbonization Roadmap

# Progress

## Project Output

### Emission Inventory Tools for Land Transport

### Decarbonization Roadmap for Land and Rail Transport

### Emission Inventory Tools for Rail Transport

**Kementerian Perhubungan Republik Indonesia**

**Panduan & Perhitungan Inventarisasi, Aksi Mitigasi, Target Penurunan, dan Monitoring Emisi GRK Transportasi Darat Tingkat Nasional**

Direktorat Jenderal Perhubungan Darat  
Direktorat Jenderal Perkeretaapian  
Pusat Pengelolaan Transportasi Berkelanjutan

**UK PACT** WRI INDONESIA  
Indonesia Road Transport Emission Calculation & Monitoring Tool  
Peranti Perhitungan dan Monitoring Emisi Transportasi Darat

**Dashboard Monitoring Emisi CO<sub>2</sub> Transportasi Darat di Indonesia**

Tahun: 2024

Penurunan Emisi CO<sub>2</sub> di Tahun 2024

Target	167,155,175 ton CO <sub>2</sub>
Aktual	168,083,927 ton CO <sub>2</sub>
Selis	928,752 ton CO <sub>2</sub> (0.55%)

Target Penurunan: 3,682,348 ton CO<sub>2</sub> (2.22%)

Modality	Target (ton CO <sub>2</sub> )	Actual (ton CO <sub>2</sub> )	%
Truck	300,000	95.45	31.82
Bus	200,000	10.37	5.19
Motorcycle	250	17.50	7.00

Delivered on Phase 1

**UK PACT** WRI INDONESIA ARUP  
Indonesia Road Transport Emission Calculation & Monitoring Tool

**DRAFT**

**Peta Jalan Penurunan Emisi Subsektor Transportasi Darat dan Perkeretaapian Tahun 2030**

Tim Penyusun: Staf Ahli Bidang Kawasan dan Lingkungan Perhubungan, Pusat Pengelolaan Transportasi Berkelanjutan, Tim RAN Direktorat Jenderal Perhubungan Darat, Tim RAN Direktorat Jenderal Perkeretaapian, World Resources Institute Indonesia

Draft Per Maret 2025

[www.ukpact.co.uk](http://www.ukpact.co.uk)

On-Progress, to be Delivered on Phase 2

**UK PACT** WRI INDONESIA ARUP  
Indonesia Railway Transport Emission Calculation & Monitoring Tool  
Peranti Perhitungan dan Monitoring Emisi Perkeretaapian

Selamat datang di Peranti Perhitungan Emisi Perkeretaapian

Bagian 1: Memilih Tahun yang Ingin Diisi

Bagian 2: Menginput Data Jumlah Penumpang

Tahun	Jumlah Penumpang
2024	0
2025	0
2026	0
2027	0
2028	0
2029	0
2030	0

Bagian 3: Menginput Data Operasional MRT (jika ada)

Bagian 4: Menghitung Emisi

Keterangan	Jumlah Penumpang (unit)							
	2023	2024	2025	2026	2027	2028	2029	2030
Target	33,406,290	40,821,425	42,314,914	44,420,059	46,602,190	48,964,799	51,424,040	54,000,741
Aktual	33,406,290	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Selis	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Keterangan	Saving Emisi dari setiap 100 Penumpang (kg CO <sub>2</sub> )							
	2023	2024	2025	2026	2027	2028	2029	2030
Target	14,888,725	17,938,972	18,972,841	19,951,209	20,476,156	21,000,509	22,574,966	23,703,754
Aktual	14,888,725	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Selis	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Keterangan	Emission Per CO <sub>2</sub>							
	2023	2024	2025	2026	2027	2028	2029	2030
Target	7,492,814	7,492,814	7,492,814	7,492,814	7,492,814	7,492,814	7,492,814	7,492,814
Aktual	7,492,814	7,492,814	7,492,814	7,492,814	7,492,814	7,492,814	7,492,814	7,492,814

Keterangan	Net Emission Saving (kg CO <sub>2</sub> )							
	2023	2024	2025	2026	2027	2028	2029	2030
Target	7,492,814	10,441,158	11,079,967	12,008,291	12,983,345	14,007,153	15,082,152	16,210,000
Aktual	7,492,814	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Selis	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

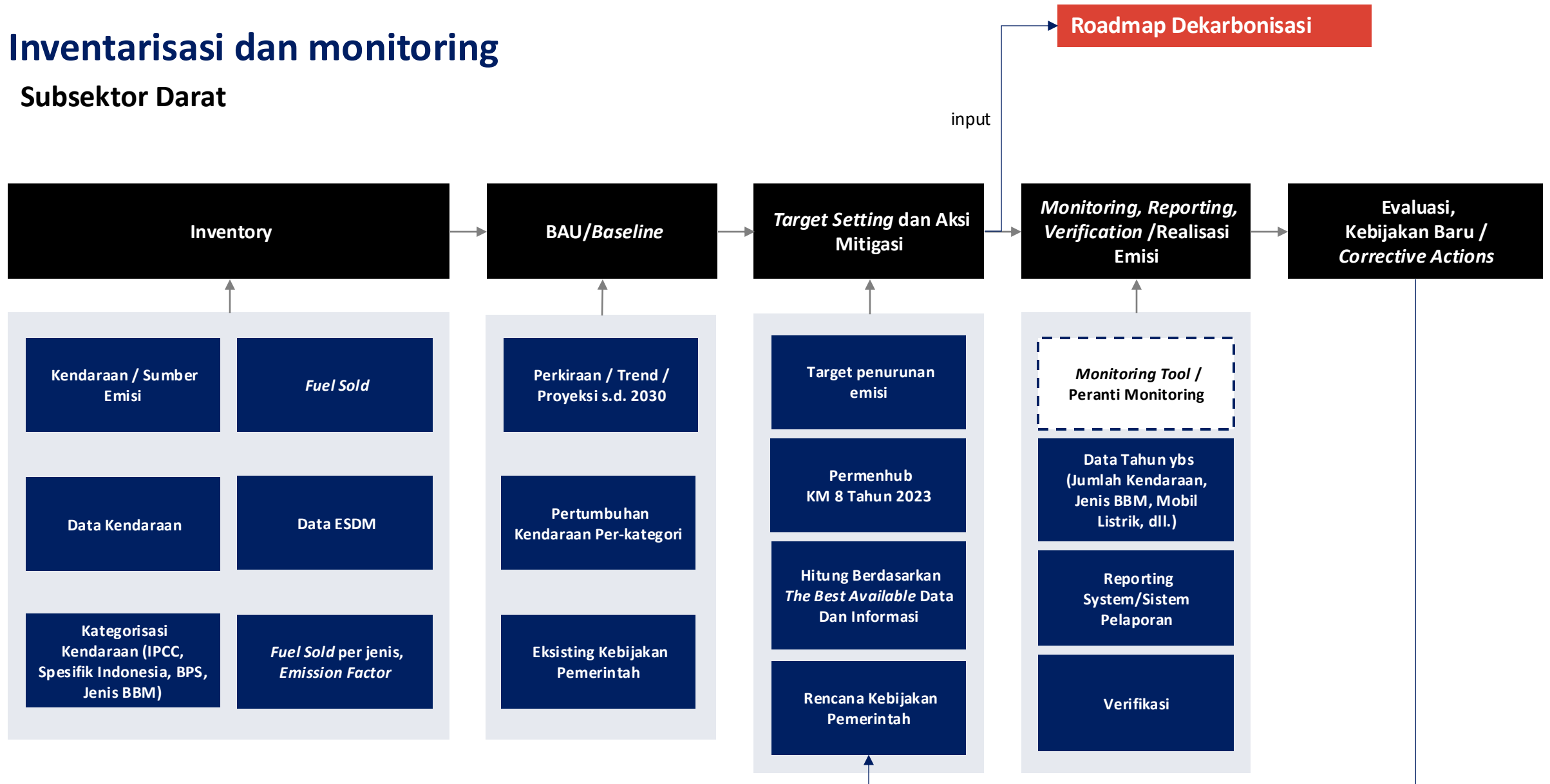
Materi ini merupakan bahan diskusi, bukan untuk disebarluaskan

# Kondisi Eksisting

	Inventarisasi Emisi	BaU/ Baseline	MRV Systems	Aksi Mitigasi	Keterangan
Darat				 Kualitatif	<ul style="list-style-type: none"> <li>• Perlu formalisasi</li> <li>• Level nasional, belum perusahaan</li> </ul>
Kereta Api				 Kualitatif	<ul style="list-style-type: none"> <li>• Sedang dalam proses</li> </ul>
Laut				 Kualitatif	<ul style="list-style-type: none"> <li>• Untuk pelayaran internasional, ada IMO</li> <li>• Belum ada untuk pelayaran domestik</li> </ul>
Udara	 Level internasional	 Level internasional		 Kuantitatif	<ul style="list-style-type: none"> <li>• Untuk penerbangan internasional, ada CORSIA dan State Action Plan</li> <li>• Bandara sedang dalam proses</li> <li>• Belum ada untuk penerbangan domestik</li> </ul>

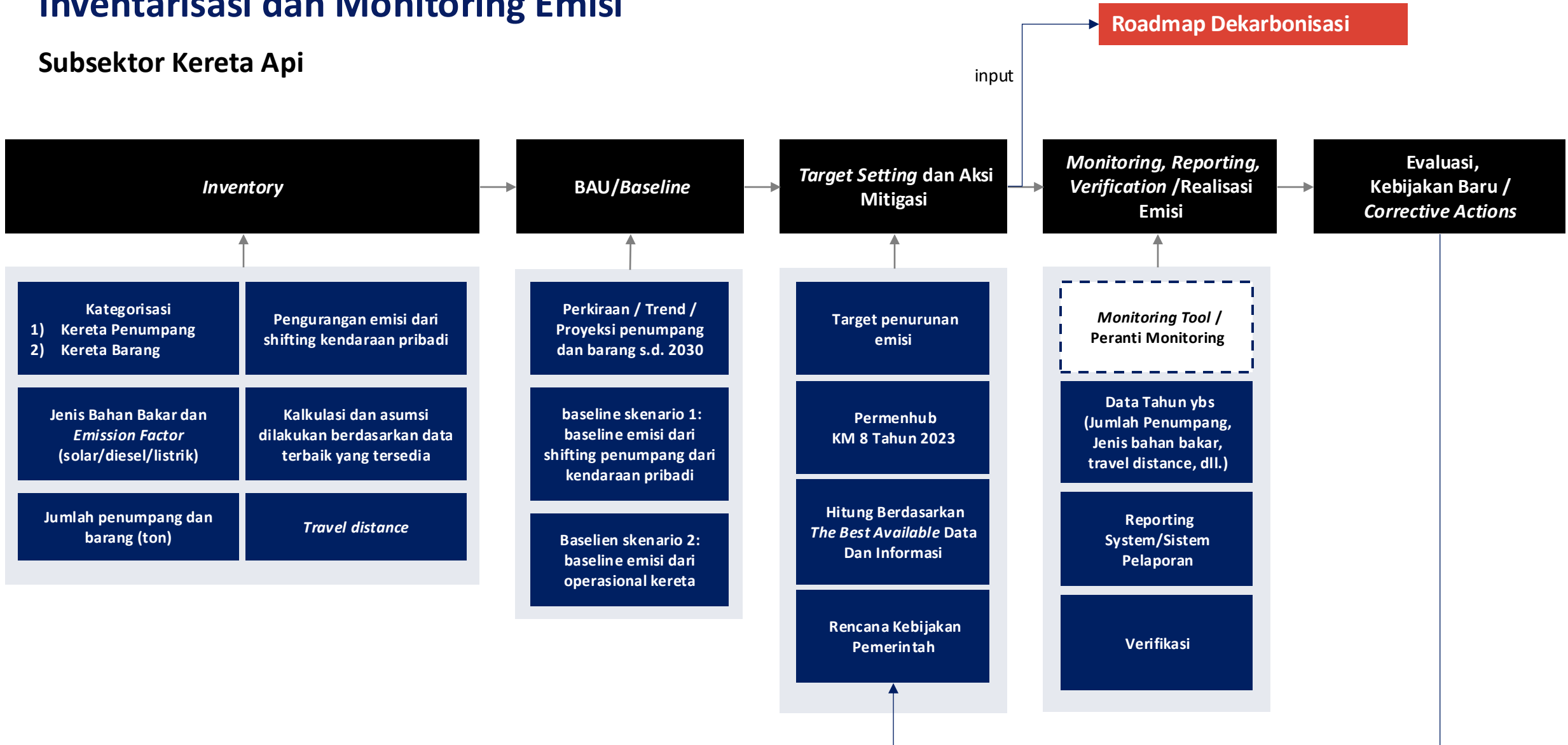
# Inventarisasi dan monitoring

## Subsektor Darat



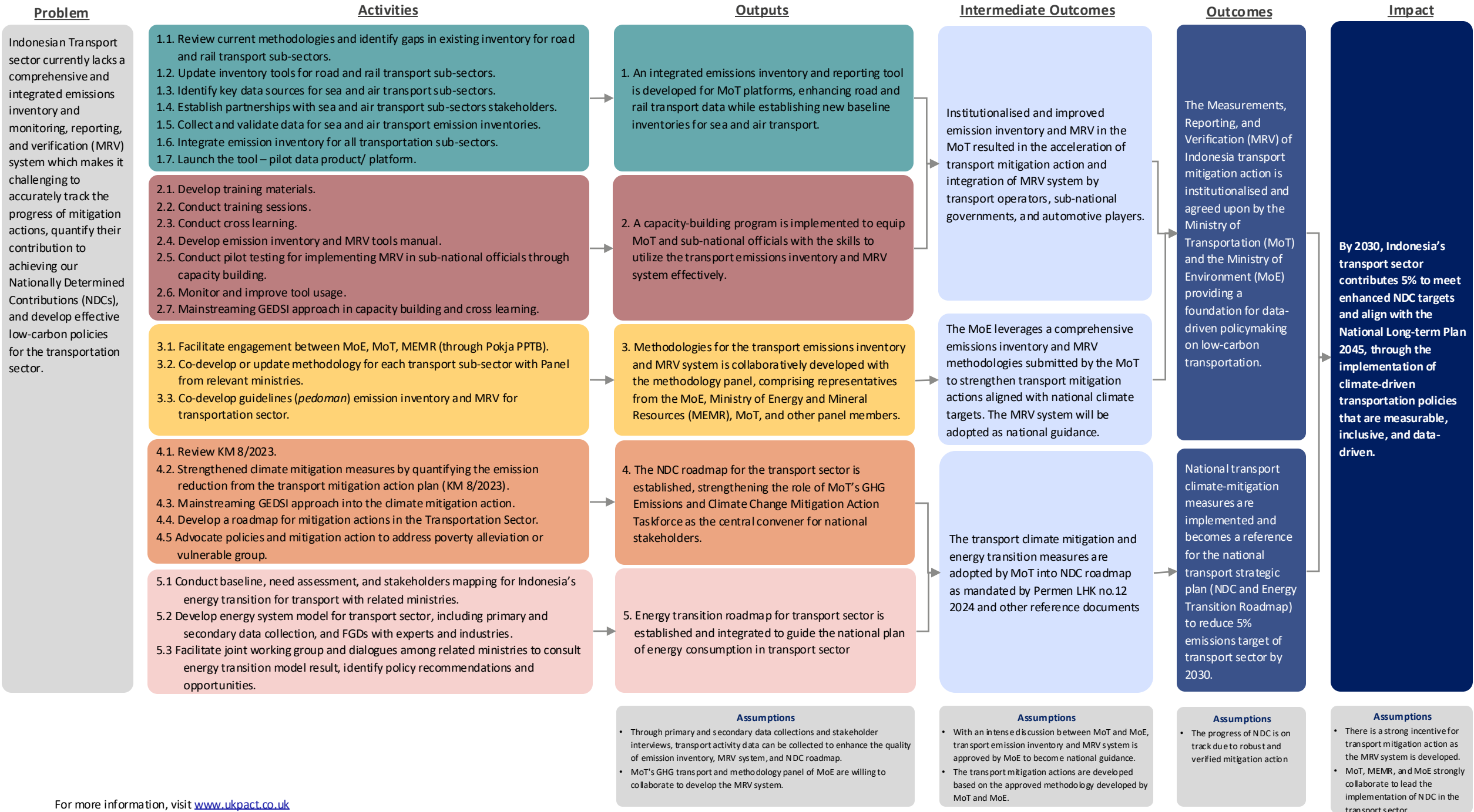
# Inventarisasi dan Monitoring Emisi

## Subsektor Kereta Api



# Workplan





# Main Output

WRI x LAPI x DSI Consortium

**Emission Inventory Systems for Road, Rail, Maritime, and Aviation Sub Sectors**

**MRV System against The Target for periodic assessment**

**Roadmap for Transport Decarbonization**

**Approved Methodologies by Focal Point (MoE) for Certified Mitigation Action**

Combination between Top Down and Bottom Up Approach: Small Discrepancy

NDC Roadmap in Transport Sector

Reliable, affordable, and efficient Data Input

Energy Transition in Transport Sector Roadmap

Easy-to-use and integrated MRV Tools

Quantified Target and Mitigation Actions

**Communication, Training, and Piloting at National and Sub-National Level**

# Detailed Deliverables

## List of Deliverables to-be-submitted *(with deadline date)*

Year 1		Year 2	
<b>Q1</b> 31-Jul-25	<ul style="list-style-type: none"><li>GEDSI Action Plan</li><li>Due Diligence Requirements</li></ul>	<b>Q1</b> 31-Jul-26	<ul style="list-style-type: none"><li>Academic Draft of Updated KM 8/2023</li><li>Methodology Progress Report</li></ul>
<b>Q2</b> 31-Oct-25	<ul style="list-style-type: none"><li>Communication &amp; Engagement Strategic Plan</li></ul>	<b>Q2</b> 30-Oct-26	<ul style="list-style-type: none"><li>Pilot testing at Sub-National Level Report</li><li>Tools and Handbook Handover Report</li></ul>
<b>Q3</b> 30-Jan-26	<ul style="list-style-type: none"><li>Updated Road and Railway GHG Inventory Tools</li><li>Data Collection and Validation Report for Maritime &amp; Aviation Sub Sector</li><li>Review KM 8/2023</li></ul>	<b>Q3</b> 29-Jan-27	<ul style="list-style-type: none"><li>Guideline of Emission Inventory and MRV for Transportation Sector</li><li>Draft of Energy Transition and NDC Roadmap in Transportation Sector</li></ul>
<b>Q4</b> 30-Apr-26	<ul style="list-style-type: none"><li>Cross Learning Report</li></ul>		

# UK PACT



WRI INDONESIA



**PT.LAPIITB**  
Delivering Solutions and Innovations that Matter



Terima Kasih  
dan  
Mohon Arahkan

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