

# EXECUTIVE SUMMARY

## Environmental Impact Assessment (EIA) for “Cadangan Ladang Hutan Di Kompartmen 15, 42 dan 43 Hutan Simpan Gunung Bongsu, Daerah Hutan Kedah Selatan Berkeluasan 500 Hektar”



### 1 INTRODUCTION

- The proposed forest plantation activities located between **Compartment 15 (N05°21'26.86", E100°39'23.62")**, **Compartment 42 (N05°20'24.51", E100°38'47.55")** and **Compartment 43 (N05°21'12.04", E100°38'48.87")**, Gunung Bongsu Forest Reserve, *Blok Perancangan 4 (BP4)*, *Mukim Karangan* and *Mukim Terap*, Kulim District, Kedah State on an approximately **500.00 hectares (1235.53 acres)** of land.
- Consist of 3 main phases namely, **pre-development, operational and treatment and maintenance phase.**

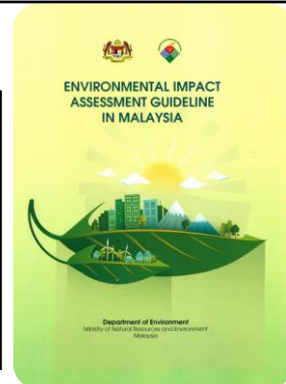
### 2 STATEMENT OF NEEDS

- To establish and manage forest plantation to supply timber supply from natural forests as well as encourage private sector investment in the establishment and development of forest plantations.
- **Supply the demand on timber products** to in order to support Industrial Development Strategy, RSNK2020.
- Project Proponent received the approval from Forestry Department Kedah State and Menteri Besar Incorporated Kedah (MBIKed) for 60 years concession period.

### 3 LEGISLATIVE REQUIREMENT

#### 5. FORESTRY (2<sup>ND</sup> SCHEDULE)

- d) *Logging, or cutting or taking of timber covering an area of 500 hectares or more.*      e) *Development of planted forest covering an area of 500 hectares or more.*



### 4 PROJECT PROPONENT & EIA CONSULTANT



**ASIA PLYWOOD COMPANY SDN. BHD.**  
**(Project Proponent)**

Plot 35-38, Kawasan Perindustrian Bukit Selambau,  
08010 Sungai Petani,  
Kedah Darul Aman



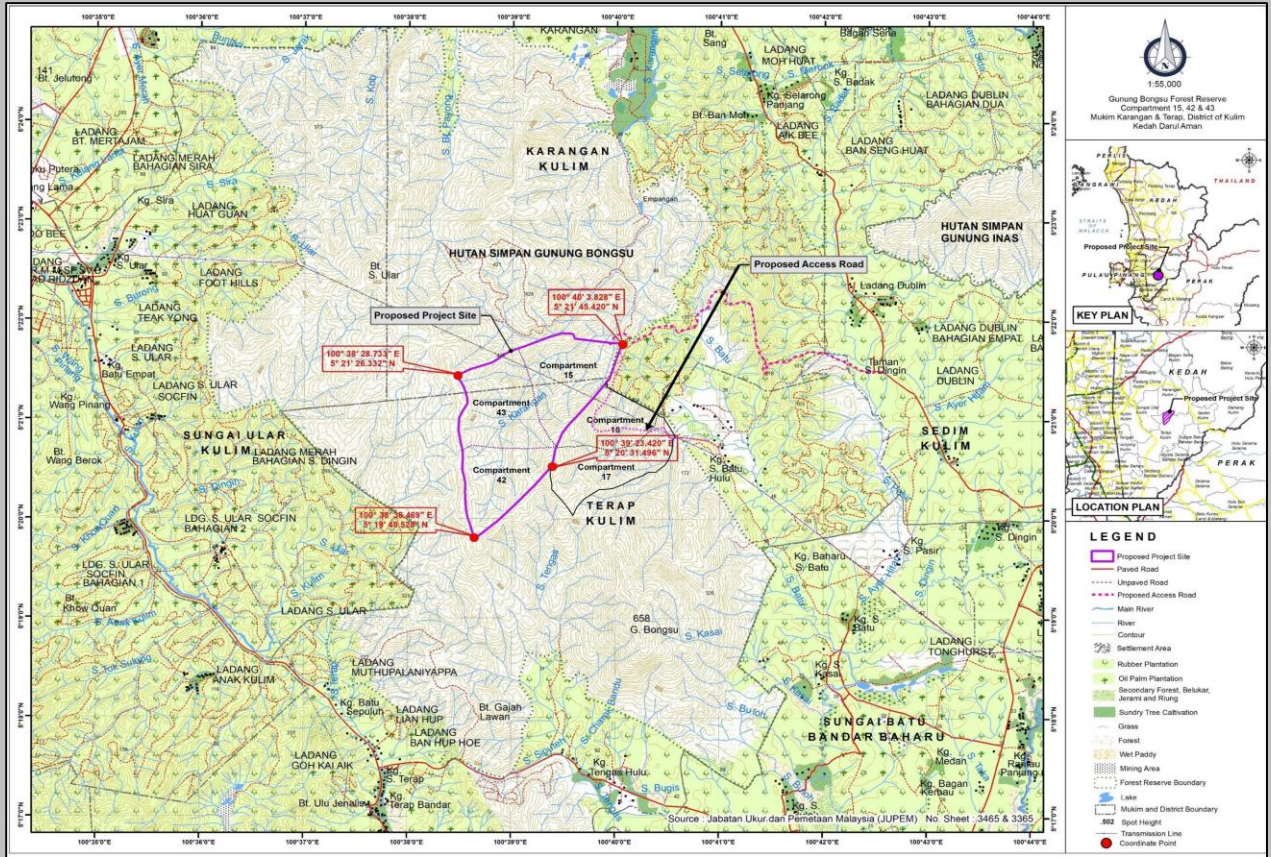
**SATWA AMAN SDN. BHD.**  
**(EIA Consultant)**

C-5-26, Century@Oasis Corporate Park  
No.2, Jalan PJU 1A/2,  
47301 Damansara, Selangor Darul Ehsan

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### 5 PROJECT LOCATION & ACCESSIBILITY



📍 **Compartment 15 (N05°21'26.86", E100°39'23.62"), Compartment 42 (N05°20'24.51", E100°38'47.55") and Compartment 43 (N05°21'12.04", E100°38'48.87"), Gunung Bongsu FR, Blok Perancangan 4 (BP4), Mukim Karangan and Mukim Terap, Kulim District, Kedah State on an approximately **500.00 hectares** (1235.53 acres) of land.**

🚗 **28 km distance from Kulim Town through Federal Road 169 (FR169) and unpaved road at FELDA Gunung Bongsu.**

🛣️ **Major access is unpaved road at Kg. Seri Bongsu (K1057) and the existing logger track (Compartment 16 & 17) at N05°20'42.1", E100°40'54.0".**

### 6 PROJECT DESCRIPTION

#### TREE SELECTION

#### COMPONENT

#### ACTIVITIES



Access Road



Facilities & Utilities



Logging & Planting



Closing

Pre-Development (Site Investigation)

Operational (Felling, Cutting & Planting)

Maintenance & Treatment



A



B



C

\*No development on **73.85 hectares** undeveloped area  
 \*3 phase development (150 hectares per time)

A)Merbau (*Albasia*)  
 B)Kelempayan (*Neolamarckia cadamba*)  
 C)Batai (*Paraserianthes falcataria*)

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### 7 EXISTING ENVIRONMENT

#### A TOPOGRAPHY

Topography: Flat, undulating and hilly.  
Elevation: 100m – 640m  
Slope: 82.5% (0°-25°), 17.5% (Above 25°)

#### B GEOLOGY

More Granite (acid intrusive)  
Less Sedimentary rocks  
Low economic value mineral

#### C CLIMATE & METEOROLOGY

**2010-2019 (BUTTERWORTH STATION)**  
Rainfall (Highest) : 2735mm (2013)  
24hr Mean Temperature: 26.7°C-29.9°C  
24hr Mean Relative Humidity: 78.6%-81.5%

#### G TERRESTRIAL FLORA

**25 species of flora** have been listed with important conservation status of *Malaysian Red list (MyBIS database)* and the Species Red List (IUCN database)

#### H TERRESTRIAL FAUNA

**45 species** Least Concern, **4 species** Near Threatened, **6 species** Vulnerable, and **4 species** Endangered.

#### I FISH ECOLOGY

**None of endemic and protected fish species** been recorded and common found at lotic environment of Peninsular Malaysia.

#### D WATER QUALITY

**10 POINT (SG.KARANGAN/SG.KULIM/SG.MUDA)**  
**CLASS II** - W1, W2, W3, W4, W5, W8, W9, W10  
**CLASS III** - W6, W7

#### E AIR QUALITY

**4 STATION (24-HR MONITORING)**  
All the results of PM<sub>10</sub> and PM<sub>2.5</sub> complied with *New Malaysian Ambient Air Quality Standards, 2020 limit.*

#### F HYDROLOGY

**21 POINT (SG.KARANGAN/SG.KULIM/SG.MUDA/SG.BATU/SG.JERONG/SG.SEDIM)**  
**River Width (Range):** 3.5 m – 94 m  
**Discharge (Range):** 0.73 m<sup>3</sup>/s - 263.52 m<sup>3</sup>/s

#### J TRAFFIC

Traffic Station 1 (TS1) and Traffic Station 2 (TS2) Junction to Access Road  
**TS1:** Peak (7.00am-8.00 am), LOS A & B  
**TS2:** Peak (8.00-9.00 am), LOS A

#### K SOCIO-ECONOMIC

**150** of samples in **10** residential areas have been examined. **37.3%** of the respondents **AGREED**, **60.0%** **DISAGREE** with the proposed project. **15%** concern on gravity water supply in Ulu Paip area.

### 8 LAND USE



Recreational area (Ulu Paip)



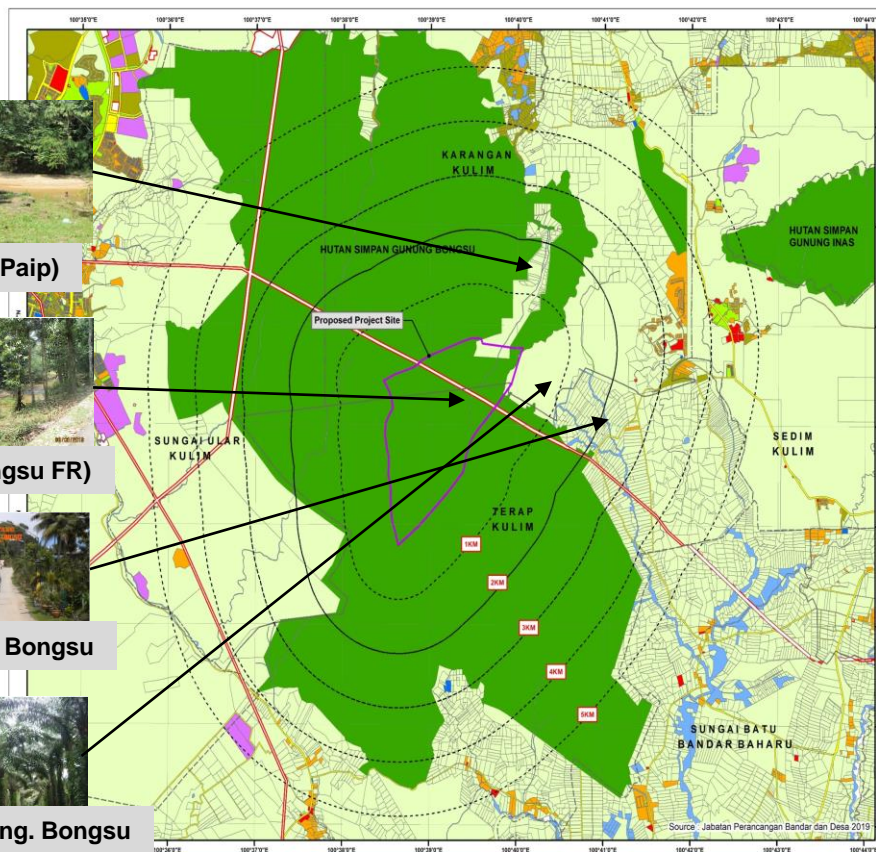
Forest area (Gunung Bongso FR)



Settlement Area (Kg. Seri Bongso)



Agriculture Area (FELDA Gng. Bongso)



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### 9 POTENTIAL IMPACTS & MITIGATION MEASURES

Significant Potential Impacts	Magnitude of Significant Impact	Pollution Prevention Mitigation Measures (P2M2)
<b>PART A: POTENTIAL IMPACTS AND MITIGATION MEASURES DURING PRE-DEVELOPMENT</b>		
No significant impact and no specified mitigation measures is required		
<b>PART B: POTENTIAL IMPACTS AND MITIGATION MEASURES DURING OPERATIONAL</b>		
<b>Air Quality</b>		
<ul style="list-style-type: none"> <li>The main sources of air pollution will be from the particulate matter emitted from movement of logging vehicles and equipment.</li> <li>Air pollution from the project is considered to be temporary and short term.</li> </ul>	Moderate / Adverse Impacts / Temporary	<ul style="list-style-type: none"> <li>Momentary road humps/speed bumps can be constructed in the project site.</li> <li>Unpaved roads shall be squirted with water to lessen dust pollution during the dry season.</li> </ul>
<b>Water Quality</b>		
<ul style="list-style-type: none"> <li>The land-disturbing activity is likely to generate potential environmental impacts (from the loose sediment being carried off site via surface runoffs).</li> </ul>	High / Adverse Impacts	<ul style="list-style-type: none"> <li>The LD-P2M2 tools must be inspected and maintained regularly in order to maintain their working effectiveness measures.</li> </ul>
<b>Hydrology</b>		
<ul style="list-style-type: none"> <li>The sediment from disturbed soils and slope would be transported into the adjacent rivers before entering into the major rivers.</li> </ul>	High / Adverse Impacts	<ul style="list-style-type: none"> <li>Install sediment traps or screens to control runoff and sedimentation effects.</li> <li>Minimize the use of backfilling.</li> </ul>
<b>Soil Erosion</b>		
<ul style="list-style-type: none"> <li>During operational (logging activities), the worst-case scenario represents a situation where the area is completely disturbed leaving a bare top soil, with no crop/plant cover or good conservation practices are not employed before closing stage initiated.</li> </ul>	High / Adverse Impacts	<ul style="list-style-type: none"> <li>The LD-P2M2 tools must be inspected and maintained regularly in order to maintain their working effectiveness measures.</li> <li>Existing vegetation shall be maintained to the maximum extent to filter runoff.</li> </ul>
<b>Geology</b>		
<ul style="list-style-type: none"> <li>The main impact (slope failure) will be landslides from the newly cut slope that might occur during the slope cutting process or after slope cutting.</li> </ul>	Moderate / Adverse Impacts	<ul style="list-style-type: none"> <li>All slope surfaces must be turfed as soon as possible to help in reducing soil erosion.</li> </ul>
<b>Terrestrial Flora</b>		
<ul style="list-style-type: none"> <li>Habitat degradation by vegetation clearing and extraction, resulting in habitat transformation with complete loss.</li> </ul>	High / Adverse Impacts	<ul style="list-style-type: none"> <li>Progressive rehabilitation of affected areas to restore ecosystem function, where possible.</li> </ul>
<b>Terrestrial Fauna</b>		
<ul style="list-style-type: none"> <li>Clearing and opening of large areas within forest reserve will pose threats to wildlife (poaching &amp; human-wildlife conflicts).</li> </ul>	High / Adverse Impacts	<ul style="list-style-type: none"> <li>Hunting of any endangered and protected species is prohibited.</li> </ul>
<b>Socio-Economic</b>		
<ul style="list-style-type: none"> <li>Majority of local resident worried about mud-flood incidents.</li> <li>Some resident in Kg. Ulu Paip used Sg. Karangan as alternative water resources.</li> </ul>	High / Adverse Impacts	<ul style="list-style-type: none"> <li>Identify each rivers water supply to avoid disruption alternative water supply to community and build a tube-well (if necessary).</li> <li>The project proponent must follow the recommendations mitigation for water quality river and soil erosion control put forward in this report.</li> </ul>
<b>PART C: POTENTIAL IMPACTS AND MITIGATION MEASURES DURING TREATMENT &amp; MAINTENANCE</b>		
<b>Water Quality</b>		
<ul style="list-style-type: none"> <li>The maintenance works will remove smaller plants and vegetation within the area and the anticipated environmental impacts will be low compared during site preparation and operational stages.</li> </ul>	Low / Adverse Impacts	<ul style="list-style-type: none"> <li>Existing vegetation shall be maintained to the maximum extent to filter runoff and provide erosion protection.</li> </ul>
<b>Terrestrial Fauna</b>		
<ul style="list-style-type: none"> <li>The impact of cleared vegetation as barrier is higher if the proposed area located within the forest.</li> <li>The human-wildlife conflict will be decline due to the replanting of forest.</li> </ul>	Moderate / Adverse Impacts	<ul style="list-style-type: none"> <li>Hunting of any endangered and protected species is prohibited.</li> <li>It is the best for not camping or stay inside the forest reserve.</li> </ul>