



Finschhafen Integrated Special Economic Zone



An Initiative of the Finschhafen
District Development Authority
In Partnership with



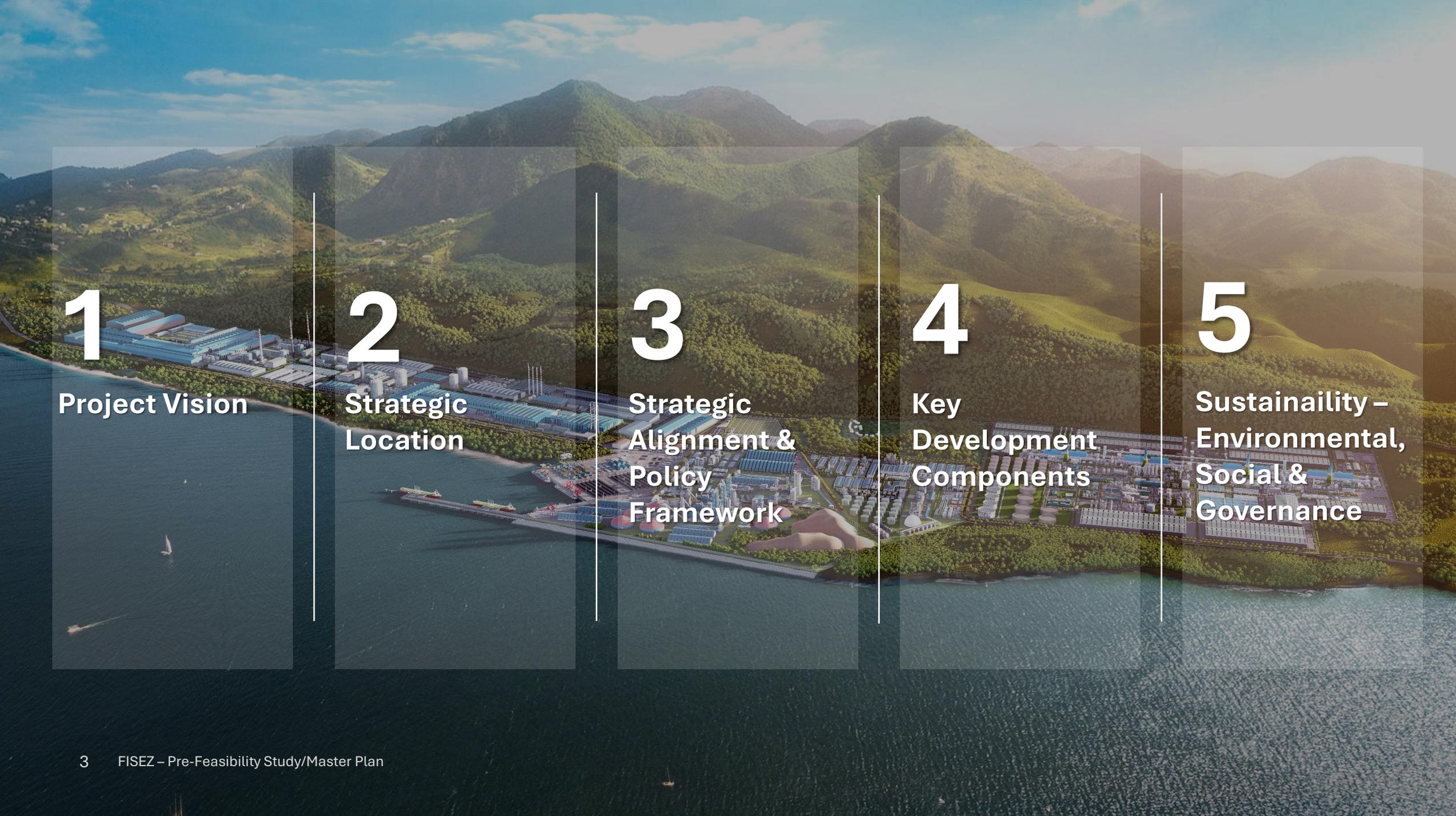
2ND PAPUA NEW GUINEA SPECIAL ECONOMIC ZONES SUMMIT 2025

Reflecting on Our Past 50 Years and Charting the Next 50 Years



FINSCHHAFEN INTEGRATED SPECIAL ECONOMIC ZONE || FISEZ



An aerial photograph of a large industrial facility, possibly a refinery or chemical plant, situated along a coastline. The facility features numerous large storage tanks, processing units, and buildings. The background consists of lush green mountains under a clear blue sky. Overlaid on the image are five vertical, semi-transparent panels, each containing a large white number and a title. The panels are numbered 1 through 5 from left to right. The overall scene is bright and clear, suggesting a sunny day.

1

Project Vision

2

**Strategic
Location**

3

**Strategic
Alignment &
Policy
Framework**

4

**Key
Development
Components**

5

**Sustainability –
Environmental,
Social &
Governance**



1

Project Vision

**PNG'S LEADING GREEN
INDUSTRIAL HUB**

Finschhafen Integrated Special Economic Zone

Empowered by hydropower and natural resources
Drive economic growth
Create job opportunities
Enhance social development
Improve local infrastructure and standard of living



Finschhafen Integrated Special Economic Zone, the future leading green industrial hub in Papua New Guinea, Join us in building a prosperous, sustainable future for our region.

Powered by **700MW of renewable hydropower**, our strategically located zone offers competitive business incentives that foster innovation and sustainable growth.

With over **\$5 billion** in expected investments, FISEZ is set to create **50,000 jobs** and boost annual exports by more than **\$1 billion**.

An aerial photograph of a coastal region. In the background, a range of green, forested mountains stretches across the horizon. The middle ground features a large, calm bay or lagoon with a sandy beach and a dense mangrove forest along its shores. The foreground shows more mangrove vegetation and a small body of water. The overall scene is lush and natural.

2

Strategic Location

Locality at National Level

Important Cities

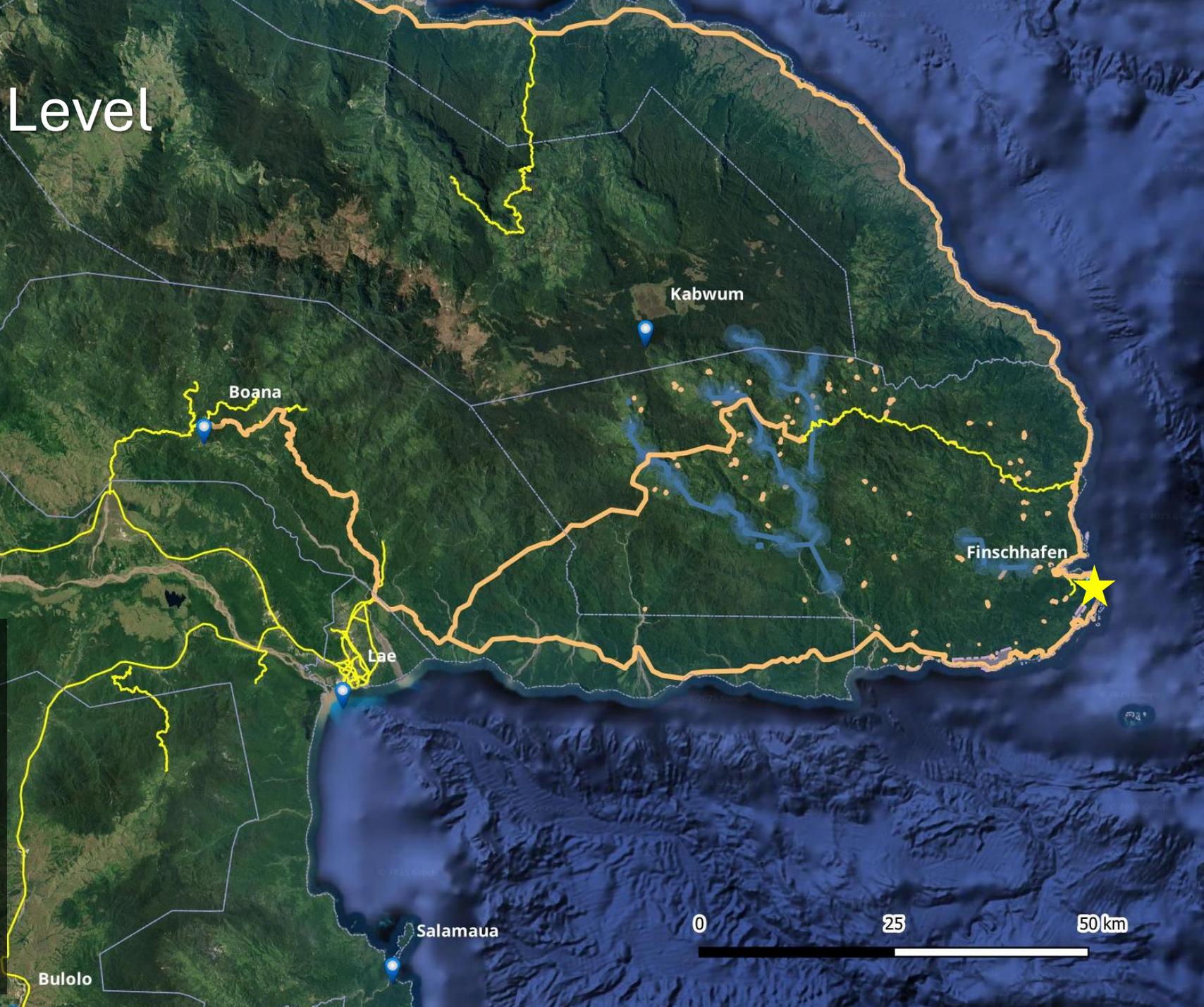


Locality at District Level

Connectivity

-  District Capital
-  Existing Road
-  Planned Road

The existing and planned highways funded by the national government, will significantly boost the FISE by linking it with Lae City, PNG's second largest urban centre, along a coastal route. This improved connectivity to surrounding districts will streamline cargo transport, promote economic growth, and facilitate smoother integration into the national market, driving broader socio-economic development in the region.



Locality in Site Level

Proposed and Ongoing Projects



The FISEZ is strategically positioned along both existing and planned coastal corridors, ensuring seamless connectivity with Lae City, Finschhafen Airport, and the township. As part of a broader regional development vision, Finschhafen Township is set to expand northward, fostering coastal development that enhances economic integration and accessibility between key urban and transportation hubs.



Proposed Finschhafen Township
(~100,000 population in 2024)



Locality in Site Level

Proposed and Ongoing Projects – Finschhafen Airport



3

Strategic Alignment & Policy Framework

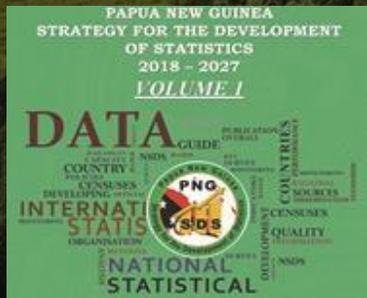
Papua New Guinea relies heavily on **natural resources**.

However, **manufacturing** and **value-adding** can be the new engine of growth



PNG relies on natural resources—mining, quarrying, agriculture. Growth is projected at **8.75% (MTDP IV)** and **3.1% (IMF)** via diversification. Focus is on downstream processing, value-added manufacturing, investment, and workforce development.

**VALUE-ADDED
MANUFACTURING**



4

FINSCHHAFEN INTEGRATED
SPECIAL ECONOMIC ZONE

Key Development Components



Leveraging Finschhafen's Resource Endowment

To Promote Industrialisation and Economic Growth



FISEZ KEY COMPONENTS:

The FISEZ project includes core hydropower, industrial zone and port projects, supporting infrastructure and social facilities, as well actions to enhance agriculture, fishery and tourism

HYDROPOWER PLANTS

Run-of-the-river hydropower plants in Finschhafen District providing up to **700 MW** of reliable, renewable electricity for the proposed FISEZ industrial zone as well as the surrounding community.

Wind Energy is still under feasibility study

INDUSTRIAL ZONES & PORT AT BUSEGA

Busega will host a **limestone mine, cement plant, and energy-intensive industries** powered by **renewable electricity**, with a **port** for importing raw materials and exporting **industrial and agricultural products**. An **industrial park** near **Finschhafen Airport** will focus on **food processing and light industries**.

ONE-STOP-SHOP & CENTRALISED COMMODITY TRADING HUB

A hub that allows Investors to access all processes of legal and commercial trading requirements and registration. One stop shop to allow streamlined or instant business registration to trade within the FISEZ

INFRASTRUCTURE & SOCIAL FACILITIES

Roads and broadband will link **industrial zones, ports, and key facilities**, while economic growth expands **electricity, water, and workforce development** in Finschhafen.

AGRICULTURE, FISHERY, & TOURISM ENHANCEMENTS

Agriculture, fisheries, and tourism will grow through **research, sustainability, and market access**, supporting **farmers, fishermen, and tourism development** in Finschhafen.

Potential Industries For FISEZ



**LIMESTONE
& CEMENT**



**GREEN
METHANOL &
GREEN
AMMONIA**



**NICKEL,
COPPER &
MANGANESE**



BIODIESEL



FISHERIES

Potential Industries For FISEZ



**LIGHT
INDUSTRIES
& FOOD
PROCESSING**



**TIMBER
& PAPER**



**RECYCLING &
WASTE TO
ENERGY**



BITCOIN



COTTAGE

Potential Industries For FISEZ



**GREEN DATA
CENTRE & 5G
TOWER**



**PHARMACEU
TICAL
PRODUCTS**



**AGRICULTURE
BY-PRODUCTS**



**INNOVATIVE
LEARNING
HUBS**



**INDUSTRIAL
WAREHOUSE**

Finschhafen Integrated Special Economic Zone



- 1 Busega Energy Park
- 2 Busega Deep Water Port
- 3 Airport Industrial Zone
- 4 Finschhafen Airport
- 5 Finschhafen Township

Finschhafen Energy Park



Nickel & Manganese, Copper and Green Steel Downstream Processing

Solar Farm

Automotive

Petroleum Refining Industry

Biodiesel & Coconut Oil Refinery

Ferry

Busega Deep Water Port

Green Methanol / Green Ammonia Production

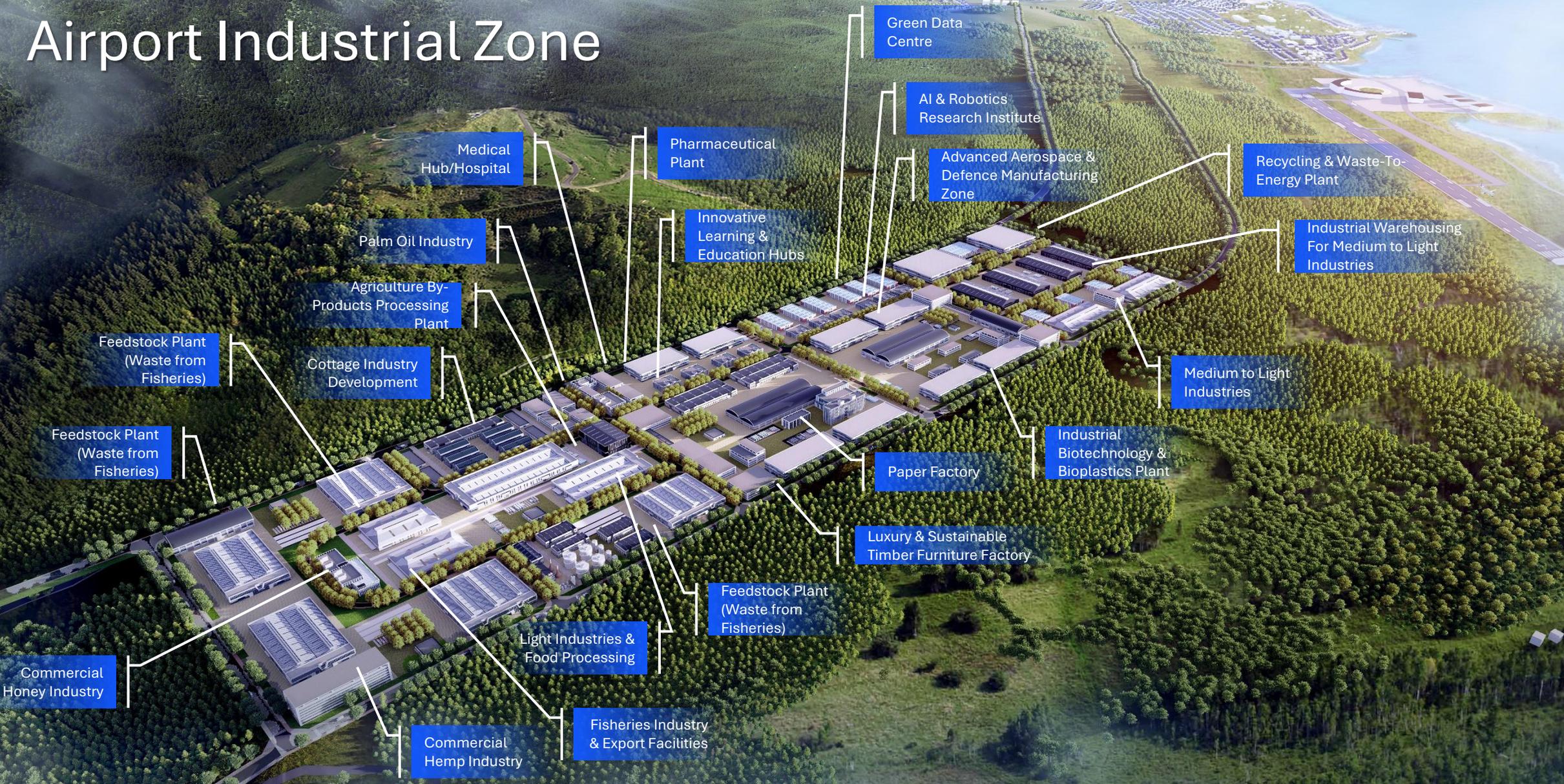
Limestone and Cement Plant



No.	Zones in Port	Land Area (ha)
1	Logistics	6.52
2	General Cargo	9.74
3	Container	4.26
4	Coal and Iron Ore	11.63
5	Ferry	1.04

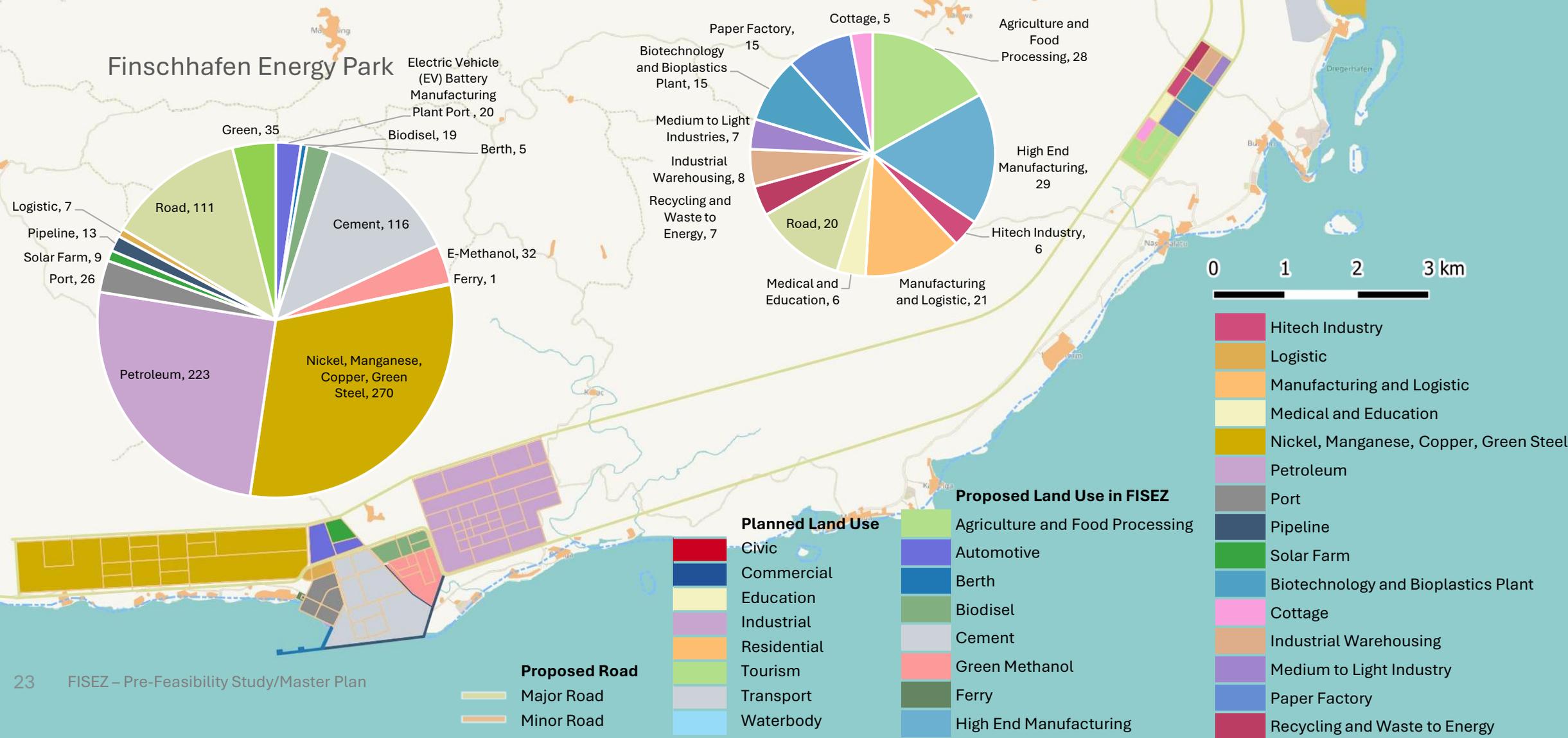


Airport Industrial Zone



Finschhafen Integrated Special Economic Zone

Land Use Plan



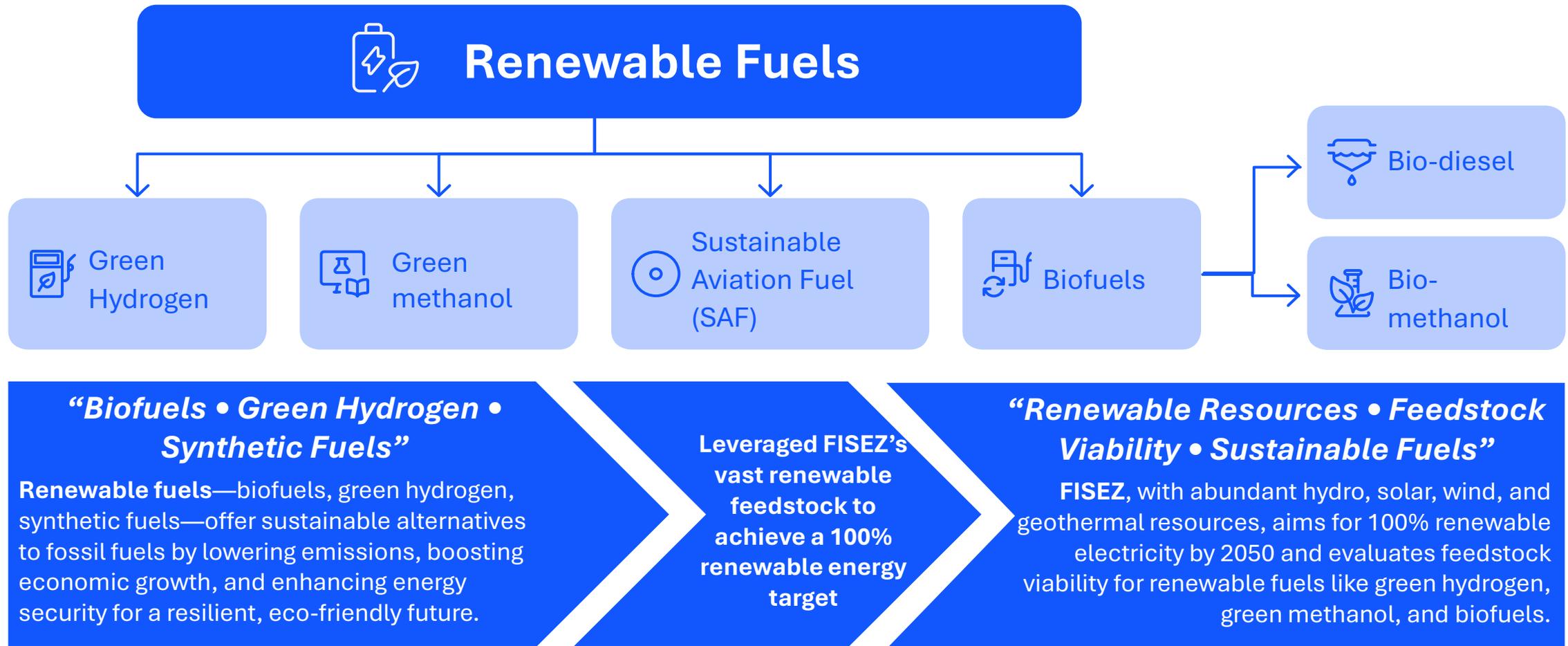
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Sustainability - Environmental, Social & Governance



ESG & Sustainability Factors for Global Investors

High level assessment of the feasibility of renewable fuels in FISEZ



ESG & Sustainability Factors for Global Investors

High level assessment of the feasibility of renewable fuels in FISEZ

Renewable Fuels	Green methanol production		Sustainable Aviation Fuel (SAF)	Bio-methanol	Biodiesel production	
	Green Hydrogen*	Green methanol			Bio-diesel	Catalyst used for biodiesel production
Main Feedstocks	Water, Renewable Energy	Green Hydrogen, Non-renewable or renewable carbon dioxide	Coconut oil, Coconut wastes and agricultural wastes	Coconut wastes and agricultural wastes	Coconut oil	Coconut wastes and agricultural wastes
Feedstock availability	Positive	Positive	Positive	Positive	Positive	Positive
Technology readiness	Positive	Positive	Negative	Positive	Positive	Negative
Cost viability	Neutral	Neutral	Negative	Neutral	Neutral	Positive
Overall	Positive	Positive	Negative. The technology is still under development.	Positive	Neutral, competing with the food feedstock	Negative. The technology is still under development.

ESG & Sustainability Factors for Global Investors

Carbon credit trading potential for investors – Type of carbon credit projects

Avoidance carbon credit: Avoidance carbon credit projects focus on **preventing or reducing greenhouse gas emissions from entering the atmosphere.**



Carbon Capture and Storage (CCS)



Reducing Emissions from Deforestation and Forest Degradation (REDD)



Improved Forest Management (IFM)

Removal carbon credit: Removal carbon credit projects actively **remove CO₂** from the atmosphere and store it long-term.

Reforestation and Afforestation

Planting trees to absorb CO₂ from the atmosphere.



Direct Air Capture (DAC)

Implementing agricultural practices that increase soil carbon storage.

Soil Carbon Sequestration

Using technology to directly capture CO₂ from the atmosphere.

Ocean-Based Solutions

Exploring technologies like ocean fertilisation and seaweed cultivation to enhance carbon absorption.

Avoidance

Technical

Nature-based



Removal



Source: Abatable (2024)

Carbon credit projects are typically categorised into **avoidance** and **removal** categories. These categories can be further subdivided into **technical** and **nature-based** approaches.

ESG & Sustainability Factors for Global Investors

Carbon credit trading potential for investors – Potential carbon credit projects in FISEZ

This table presents a high-level assessment of potential **engineering-based carbon credit projects for sale to Singapore in the FISEZ**, based on the recent Article 6 cooperation agreement between Singapore and Papua New Guinea.

No	Carbon Credit	Description	By-Product	High Level Feasibility Study
1	CO2 Utilisation in Concrete Production	Uses CO ₂ as a feedstock in concrete to lower emissions by capturing waste CO ₂ and reducing cement usage in energy-intensive production.	Low-carbon concrete (CarbonCure)	Neutral; viable if local concrete manufacturers collaborate.
2	Biochar Utilisation in Soil and Non-Soil Applications	Quantifies emission reductions from biochar production via improved waste handling, its application in soils, and in non-soil materials like cement/asphalt.	Biochar	Positive; enhances value by integrating FISEZ industries and circular economy.
3	Biodiesel from Waste Oil/Fat for Fuel	Reduces emissions by blending biodiesel from waste oil/fat with petrodiesel for use in stationary or mobile installations within the FISEZ.	Blend of petrodiesel and biodiesel	Neutral; favourable if fuel use remains within FISEZ boundaries.



Finschhafen SEZ is a sustainable investment magnet meeting top ESG standards with renewable fuels, —green methanol, bio-methanol, biodiesel, and green hydrogen— for a net-zero future.

Meeting ESG Criteria

Transparent carbon trading via the Singapore-PNG Article 6 agreement and projects like CO₂ concrete, biochar, and waste biodiesel drive economic growth and a greener tomorrow.

Phasing Plan

Infrastructure Development Roadmap

2025-2035 (Phase 1)

Foundation Phase: SEZ Masterplan, Investment MOUs, Initial Infrastructure and industries

Action plan:

Establish core infrastructure, including hydropower, port facilities, roads, and an airport.

Concurrently, construct a cement plant and develop light industries near the airport.

2035-2045 (Phase 2)

Industrial & Social Services Development Phase: Hydropower, Industrial Zones Construction, Tourism and Medical Services

Action plan:

Develop heavy industries such as nickel, green methanol and hydrogen, while setting up medical services to support the increased population in FISEZ.

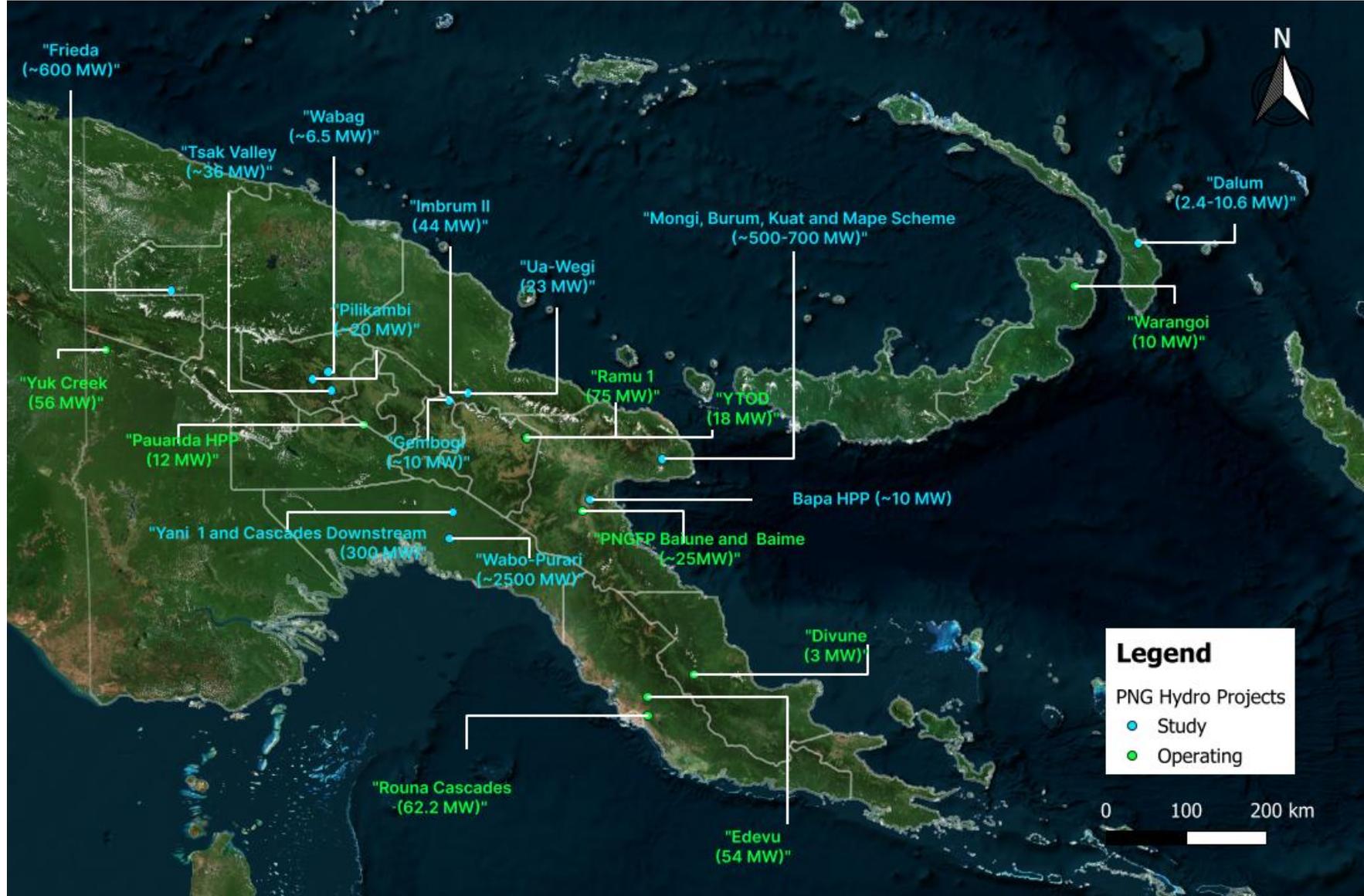
Digital Transformation Phase: Tech & Digital Economy Expansion, Full SEZ Operational

Action plan:

Leverage a reliable ICT infrastructure to foster a robust digital economy, with initiatives including pharmaceutical plant, the establishment of an AI hub, data centre, and smart logistics.

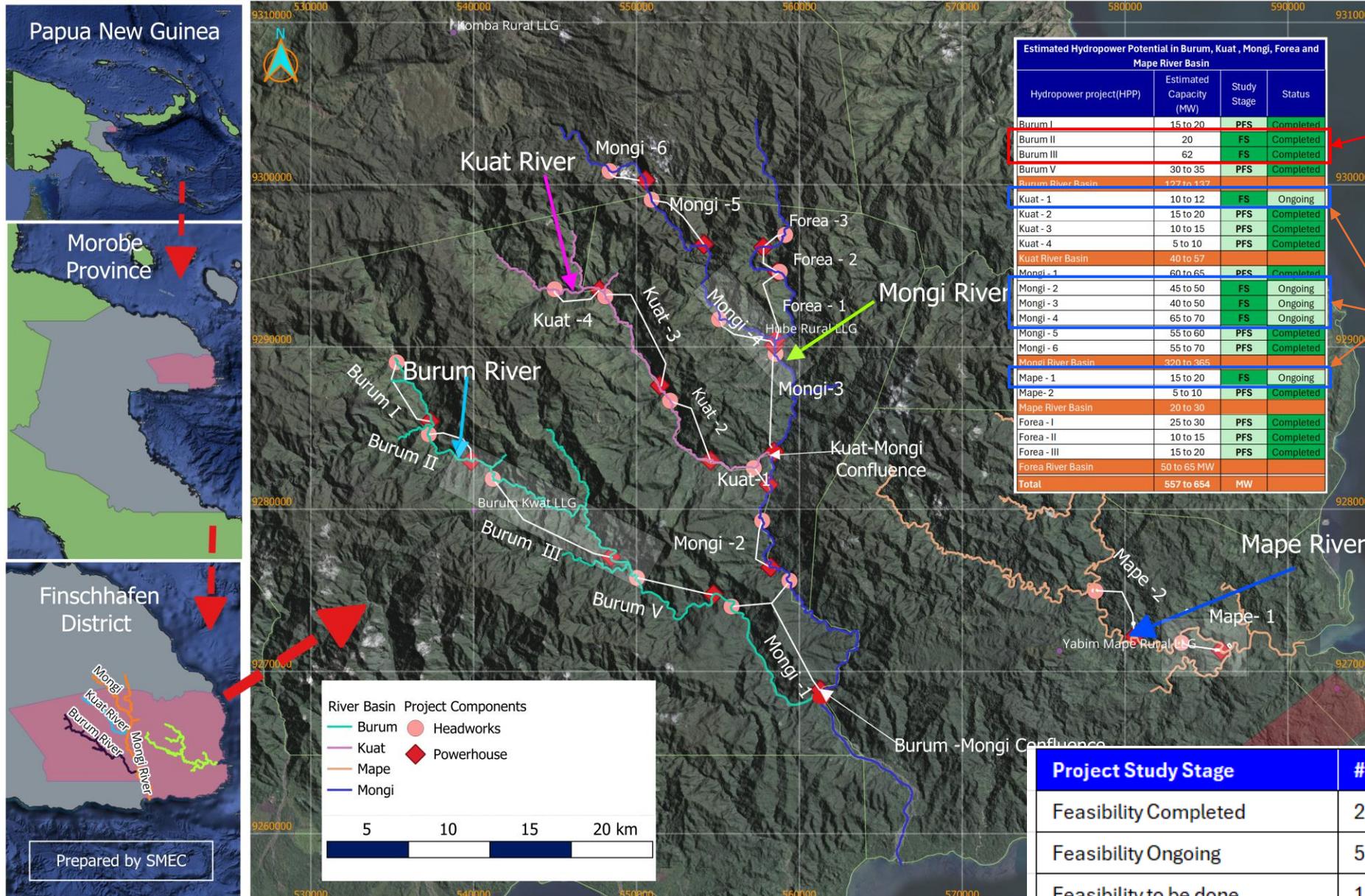
Hydropower Projects in PNG

(Known to SMEC from its involvement at various stages in the past and present)



Hydropower Projects in Finschhafen

Potential Hydropower Projects in Burum, Kuat, Mongi, Forea and Mape River in Finschhafen District



Estimated Hydropower Potential in Burum, Kuat, Mongi, Forea and Mape River Basin			
Hydropower project(HPP)	Estimated Capacity (MW)	Study Stage	Status
Burum I	15 to 20	PFS	Completed
Burum II	20	FS	Completed
Burum III	62	FS	Completed
Burum V	30 to 35	PFS	Completed
Burum River Basin	127 to 127		
Kuat - 1	10 to 12	FS	Ongoing
Kuat - 2	15 to 20	PFS	Completed
Kuat - 3	10 to 15	PFS	Completed
Kuat - 4	5 to 10	PFS	Completed
Kuat River Basin	40 to 57		
Mongi - 1	60 to 65	PFS	Completed
Mongi - 2	45 to 50	FS	Ongoing
Mongi - 3	40 to 50	FS	Ongoing
Mongi - 4	65 to 70	FS	Ongoing
Mongi - 5	55 to 60	PFS	Completed
Mongi - 6	55 to 70	PFS	Completed
Mongi River Basin	320 to 365		
Mape - 1	15 to 20	FS	Ongoing
Mape-2	5 to 10	PFS	Completed
Mape River Basin	20 to 30		
Forea - I	25 to 30	PFS	Completed
Forea - II	10 to 15	PFS	Completed
Forea - III	15 to 20	PFS	Completed
Forea River Basin	50 to 65 MW		
Total	557 to 654	MW	

Feasibility Completed

Feasibility Ongoing

Project Study Stage	# of Projects	Capacity [MW]
Feasibility Completed	2	72
Feasibility Ongoing	5	175 to 202
Feasibility to be done	12	300 to 370

Papua New Guinea

Morobe Province

Finschhafen District

Prepared by SMEC

River Basin
 Burum
 Kuat
 Mape
 Mongi

Project Components
 Headworks
 Powerhouse

5 10 15 20 km

Finschhafen Integrated Special Economic Zone



The Heartbeat of Asia-Pacific's Green Industrial Hub
Where 700MW of Renewable Energy Fuels Tomorrow
Your Gateway to a Circular Industrial Ecosystem and a Zero-Emission Future