# **Vessel Operations Web Application**

Showcasing Agentic AI in Maritime Operations

## **Logistics & Supply Chain**

## Real-Time Tracking

Shipment	Location
Shipment A	Location 45
Shipment B	Location 78
Shipment C	Location 12

## Predictive Forecasting

Shipment	Predicted Delay (hours)
Shipment A	2
Shipment B	4
Shipment C	1

### **Automated Processing**

Shipment	Schedule
Shipment A	Scheduled at 10:00
Shipment B	Scheduled at 14:00
Shipment C	Scheduled at 16:00

Home	Logistics	Sustainability	Vessel Operations	Chat	Dashboard

# **Sustainability Report**

### **Monitoring Data**

### Fuel Consumption (liters/hour)

Vessel	Fuel Consumption
Vessel A	54.56
Vessel B	67.46
Vessel C	77.18

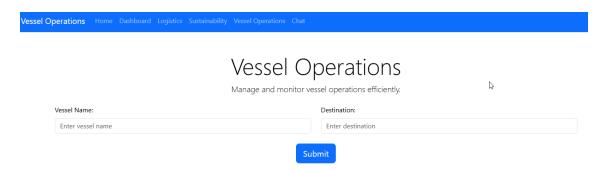
### Emissions (kg CO2)

Vessel	Emissions
Vessel A	146.23
Vessel B	180.80
Vessel C	206.84

### **Resource Allocation**

Vessel	Allocated Resource
Vessel A	Crane 1
Vessel B	Crane 2
Vessel C	Crane 3

Sustainability metrics calculated successfully.



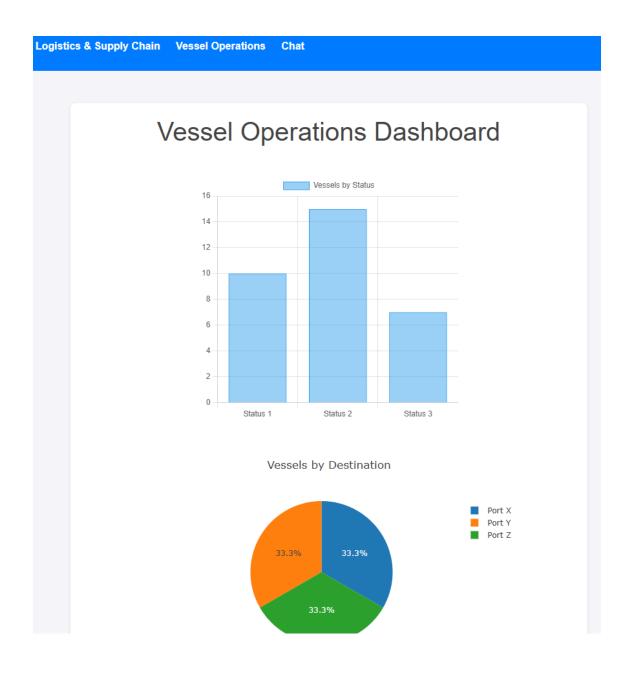
#### **Vessel List**

Name	Destination	Status
Vessel A	Port X	In Transit
Vessel B	Port Y	Docked
Vessel C	Port Z	Maintenance
Vessel A	Port X	In Transit
Vessel B	Port Y	Docked
Vessel C	Port Z	Maintenance
Vessel A	Port X	In Transit
Vessel B	Port Y	Docked
Vessel C	Port Z	Maintenance
Vessel A	Port X	In Transit

Vessel Operations Home Dashboard Logistics Sustainability Vessel Operations Chat

## **Al Assistant**

Type your question here... Send



### **Home Page**

The Home page provides a welcoming interface and quick access to all major features of the application.

#### **Dashboard**

The Dashboard displays real-time and historical metrics, including vessel status, fuel consumption, emissions, and delays, using interactive charts.

### Logistics

The Logistics page offers real-time tracking, predictive forecasting, and automated processing for shipments, improving supply chain visibility.

### Sustainability

The Sustainability page reports on fuel consumption, emissions, and resource allocation, supporting green shipping initiatives.

### **Vessel Operations**

This page allows users to manage and monitor vessel operations, submit feedback, and view vessel lists and maps.

### Al Assistant (Chatbot)

The Chatbot page integrates an AI assistant to answer user queries, provide operational insights, and support decision-making.

### The Importance of Agentic Al

Agentic AI refers to artificial intelligence systems that can act autonomously, make decisions, and proactively optimize operations. In this application, Agentic AI enables:

- Predictive analytics for traffic, fuel, and maintenance
- Real-time anomaly detection and proactive alerts
- Dynamic resource allocation and route optimization
- Intelligent assistance via the chatbot

By leveraging Agentic AI, maritime operations become more efficient, resilient, and sustainable, reducing costs and improving service quality.