



### **Identifying Opportunities** 16<sup>th</sup> February 2011

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16<sup>th</sup> February 2011



# What opportunity are we looking for?

- Improving the economy
  - Access
    - Coal mines
    - Markets, concentration/scale
  - Freight rates
    - Direct shipping of container
    - Ability to generate competition
    - Capacity surplus
- Commercial gain
  - Investment returns
  - Cash generation
  - Capital gain
  - Security



### What matters most?

- The market...
  - Access
  - Sustainability
  - Volumes
  - Rates
- CAPEX
  - What is sensitive and what is not
- Financial Structure
  - Business Model
  - Partners
  - How you fund
- and the others...
  - OPEX
  - Tax, regulation etc...



### the others first...

- OPEX
  - Should be "deterministic"
- Tax
  - Land tax, income tax, duties etc...
    - Opportunities to invest/FDI competition
  - Holidays and incentives
    - Capital allowances
- Regulations
  - Same for everyone?
  - Impacts on structure of business important
    - Fuel subsidies
    - Restrictions on what can be done
  - Direct impact but concern is also potential for change
  - Represents a risk



### Markets

• What does an opportunity look like?

- Market, by sectors
  - Containers
  - Petroleum/Vegetable Oils/Bio Diesel
  - Coal
  - Grain/Fertilizer
- Long term/Sustainable
  - Iron ore in India?
- Competition
  - Existing players
  - Change of use
  - Alternative logistics routes
  - Greenfield
  - Market changes

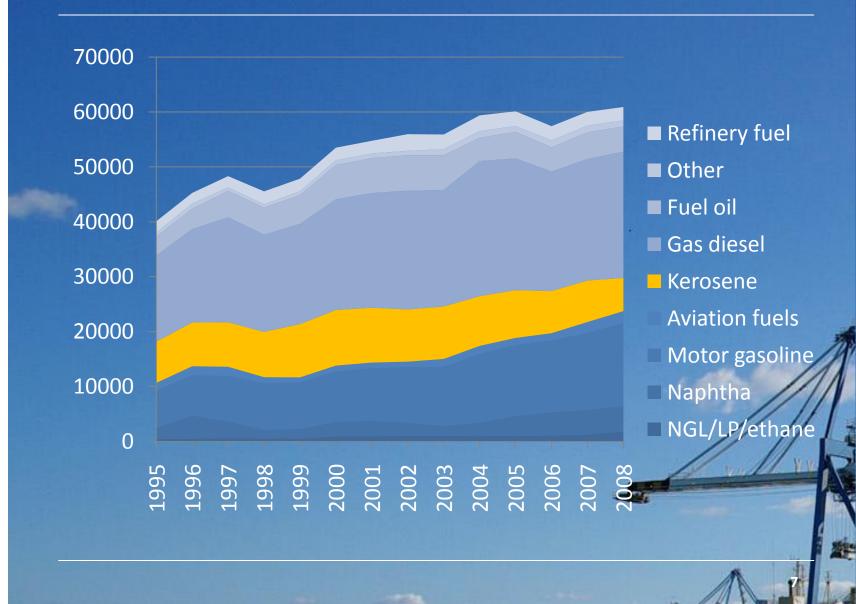


# Oil Tanking





### Product demand





# Strategic Storage

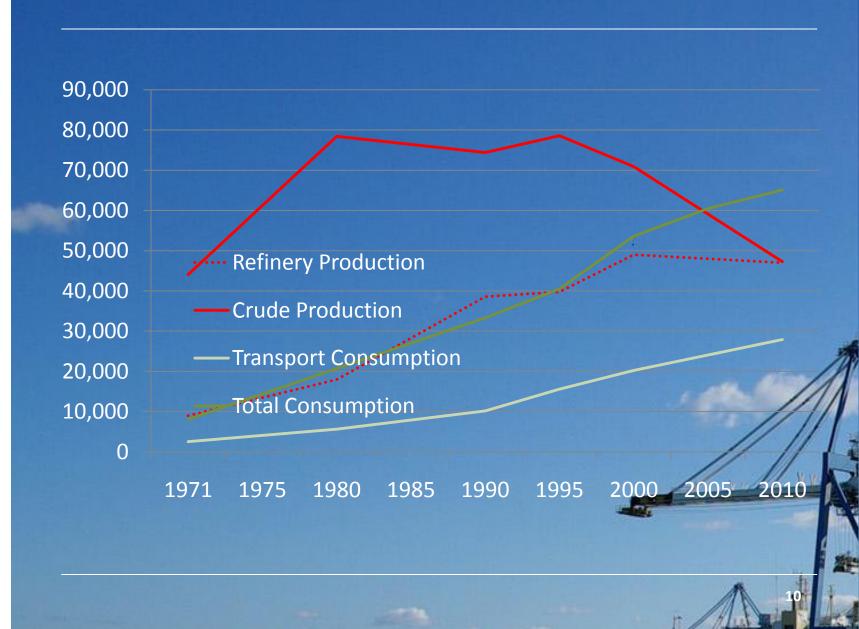
- Requirements of IEA:
  - 90 storage for energy requirements
- Current capability:
  - 28 days or less for members
  - 14 days of less for non members
- Korea, China & Japan ahead
- Other contracts out everywhere
  - Europe to Asia etc...

# Forecast of demand

	Two (	Crises One R	ecovery	One Cı	risis One Red	covery	
	Growth Rate	2020	2030	Growth Rate	2020	2030	
NGL/LP	9.9%	5,713	14,660	12.2%	7,343	23,225	
Naphtha	4.0%	7,445	11,041	11.6%	17,350	52,071	
Motor gas	5.7%	29,334	50,834	6.0%	30,425	54,351	
Av. Gas	2.1%	2,692	3,319	6.7%	4,559	8,722	
Kerosene	-2.6%	4,380	3,353	-3.1%	4,153	3,041	
Gas diesel	1.7%	28,144	33,301	2.7%	31,491	40,919	
Fuel oil	-0.5%	4,326	4,124	-0.8%	4,179	3,871	
Other	5.4%	2,072	3,500	6.8%	2,441	4,727	
Ref. Fuel	1.6%	2,969	3,485	0.3%	2,545	2,627/	
	Forecast	87,074	127,616	Forecast	104,484	193,555	
	Bunkers	440	440	Bunkers	440	440	
		87,514	128,056		104,924	193,995	



# Crude and refining statistics





### Refineries...

- "Although there will still be a gap between supply and demand in 2017, we won't have to import refined products" April 2010
- "A study suggests the project is not economically viable. But, we are not saying we will drop the project as we still need to discuss this with our partners" September 2010



### **Demand forecast**

Description	Two	Crisis	One Crisis		
Description	2020	2030	2020	2030	
Total forecast consumption	87,514	128,056	104,924	193,995	
Existing Refinery Capacity	47,000	47,000	47,000	47,000	
Existing net imports	13,000	13,000	13,000	13,000	
New domestic capacity	20,000	20,000	20,000	20,000	
Forecast of net imports	33,514	74,056	50,924	139,995	

- 5 million m<sup>3</sup> storage required over next 10 years maintain status quo in supply security and quality
- To meet "real" demand efficiently in the order of 15 million m<sup>3</sup> required



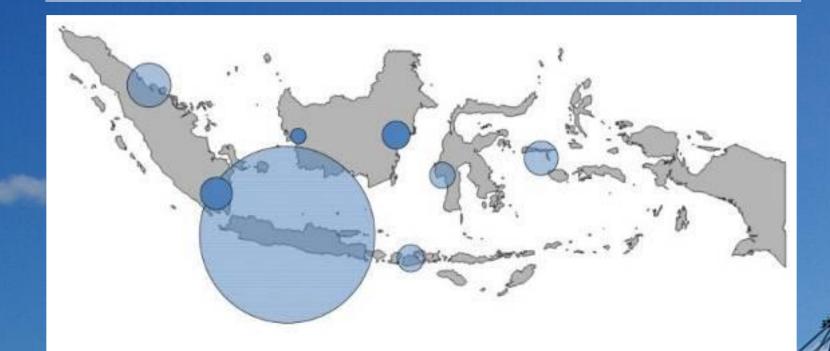
# Competition

Company/Development	2000	2006	2010	2013	Comment
Grand Total	15,078	15,078	15,717	18,517	Mostly crude storage
Pertamina	14,888	14,888	14,914	14,914	Mostly crude storage
Oiltanking	0	0	283	283	Facility being used for trading
TEP	0	0	100	100	Small scale operations
Vopak	0	0	198	198	
Dovechem	62	62	62	62	Small scale operations
Sinopec JV				2,600	Permissions not complete
Bangka (Mberutu)				100	SBM /50,000 DWT tanker
East Java (Mberutu)				100	50,000 DWT largest tanker
Others	128	128	160	160	Shell, BP and Petronas etc.
Effective 3rd Party Storage	190	190	803	3,603	

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# Distribution

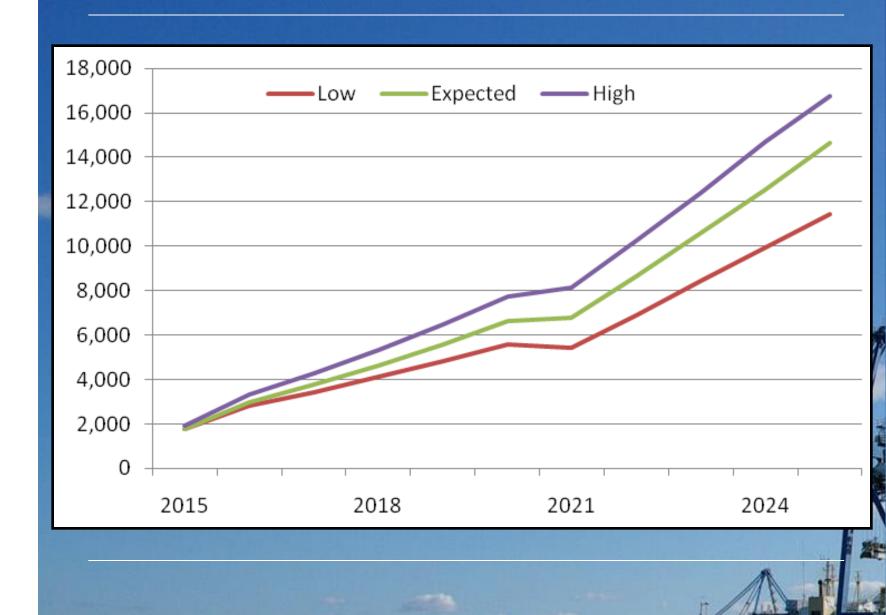


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- Java Direct
- Central Indonesia
- Malacca Focus



# Traffic forecast





### Tariff forecast

	Penang	РТР	Singapore	North-port	West-port	Tanjung Priok
20' FCL	\$ 66	\$ 57	\$ 107	\$ 73	\$ 73	\$ 83
40' FCL	\$ 94	\$ 83	\$ 154	\$ 110	\$ 110	\$ 125
20' EMT	\$ 66	\$ 32	\$ 57	\$ 73	\$ 73	\$ 62
40' EMT	\$ 94	\$ 45	\$ 84	\$ 110	\$ 110	\$ 93

- Supply of capacity restricted
- Utilization rates high
- Discounts
  - Terminal operators resistant due to change in returns
  - Capacity constraints make them difficult to obtain
- Forecast for the future
  - Difficult to see rapid change to existing level of competition
- Long term Tariff Levels
  - Full TEU US\$ 84, Full FEU US\$ 125

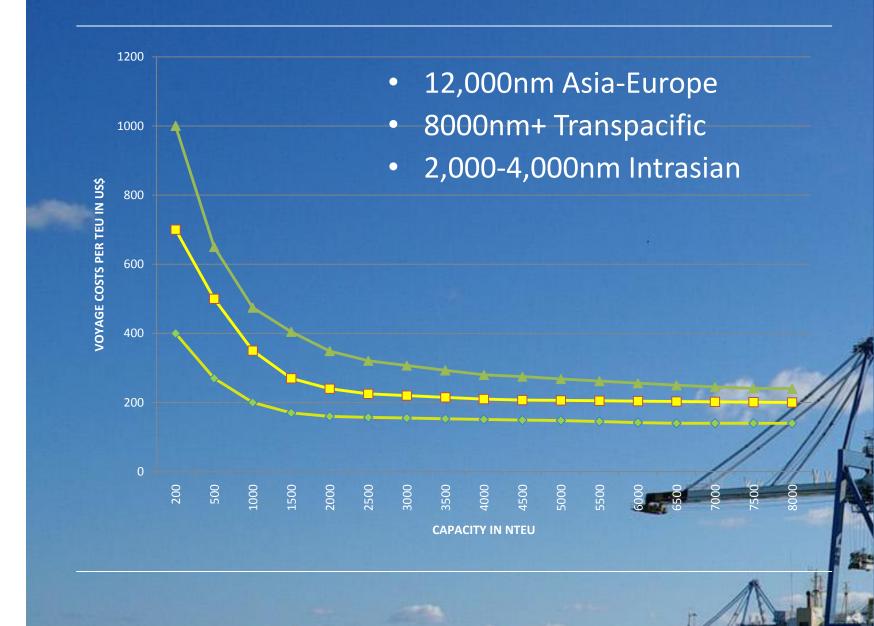
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# **Competition in Shipping/Ports**

- Between shipping lines
  - Who are their market?
  - What is its nature?
  - Key competition factors
- Between ports
  - Who are their market?
  - What is its nature?
  - Key competition factor
- Between terminals
  - Who are their market?
  - What is its nature?
  - Key competition factors
  - Equivalence in capability
  - Ship size, routings, productivity
  - Available capacity
  - Price



# Understanding the market...





# **Business Opportunities**

	Existing Services	Extended services	New services
Existing Markets	Share of Customer New Customer Penetrate catchment area	Extended reefer services Empties depot Lashing	Local transport Container repair Port Services
Extended Markets	Extend catchment area Develop shipper relations New feeders	Inspection services Administration services	Built network Intermodal services
New Markets	Penetrate emerging areas	CFS Cold Storage	Warehousing Distribution centres



# The Strategy

- Develop Relay Transshipment
  - Must have better Middle East
  - Develop as a foci for specific lines
- Hub and Spoke
  - Inbound to Penang as General Cargo?
  - Inbound to Penang as RORO
- Extend the Hinterland
  - North Sumatera
  - Bangladesh
- Go for niche markets

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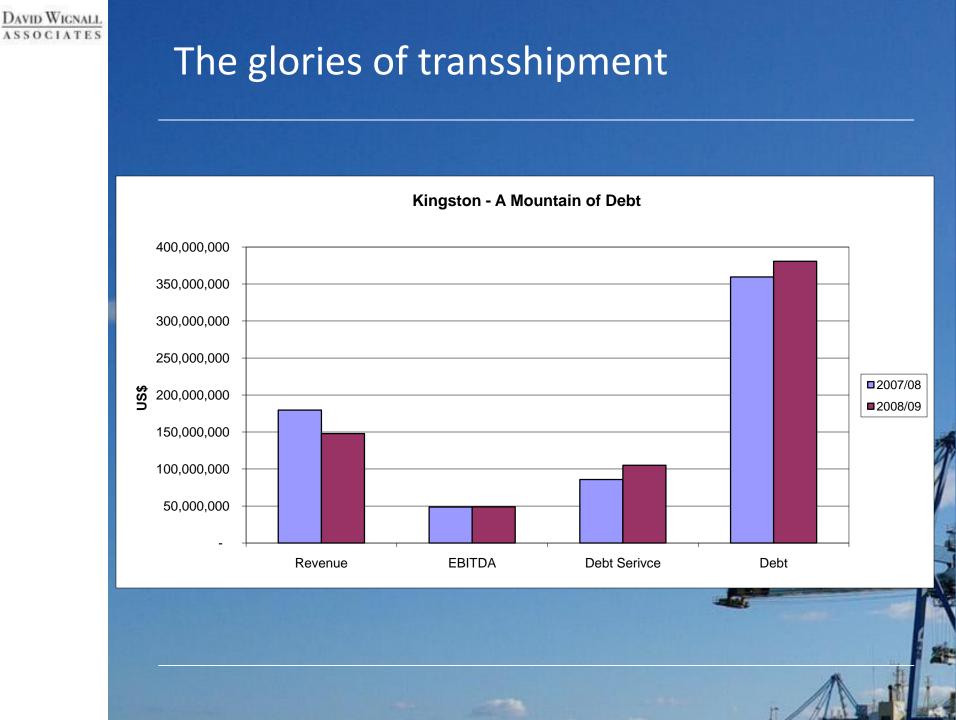
# **Extending the Hinterland**

- New area...
  - 20m people with strong resource base
  - Significant domestic trade with high costs
  - Still heavily General Cargo (LCL/stuffing)
- Further extension
  - Can only feed containers (draft issues)
  - Very substantial market 1.2m TEU (2009)
  - Domestic links and networks count
  - Big pipe issue is relevant



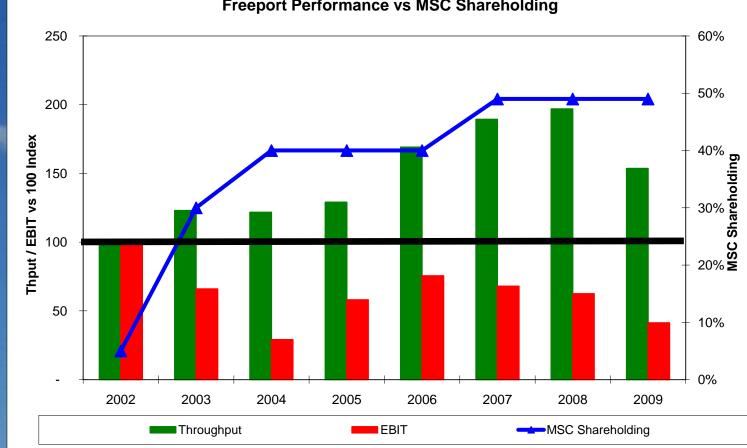
# **Target Shipping Lines**

- Not Asia-Europe focused
  - 2<sup>nd</sup> tier operators
  - Not general feeders
- Serve cargo from hinterland
  - Rubber, CPO etc...
  - High value logistics niches car parts
  - Bring empties/hub empties
- Middle East
- In-bound dedicated feeds
  - RORO and consolidation





# and the wonders of shareholding



#### Freeport Performance vs MSC Shareholding



# Capital Expenditure (CAPEX)

- Capital expenditure
  - The total matters, obviously
  - The breakdown matters almost as much
- Time and timing
  - When the money needs to be spent
  - Large contract cash flow
  - Maximum negative cash flow
  - First revenue and build up of revenues
    - Working capital requirement



# The nature of Capex

Description	US\$ (million)	When	Cost overrun	Time overrun	Importance at Pre-FS	
Studies	\$ 1 or 2	Early and continuing	Small	High	Insignificant	
Approvals	\$ 5 to 10	Early	Small	High	Marginal	
Dredging	\$150	Construction	High	Moderate	Significant	
Reclamation	\$720	Construction	High	Moderate	Significant	
Quay	\$400	Construction	High	Moderate	Significant	
Breakwater	\$305	Construction	High	Moderate	Significant	
Roads	\$5	Construction	Moderate	Moderate	Marginal	
Stack Yard	\$160	Late	Moderate	Moderate	Marginal	
Buildings	\$63	Late	Small	Small	Marginal	
Electrical	\$90	Late?	Small	Small	Marginal	
Equipment	\$ 300	Late?	Small	Moderate	?	
Reserves	\$190				-	

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# Understanding more about sensitivity

- Super-structure
  - Buildings
  - Tanks
  - Paving
  - Crane rails...
- Equipment/M&E
  - Should be deterministic
- Sub structure
  - Reclamation
  - Foundations
  - Dredging
  - Cause of most cost and delay problems
    - Can be mitigate...
    - Design to minimize risk
    - Soil/Ground Investigations



# and its distribution

- Super-structure
  - 40%
- Equipment/M&E
  - 25%
- Sub structure
  - 35%

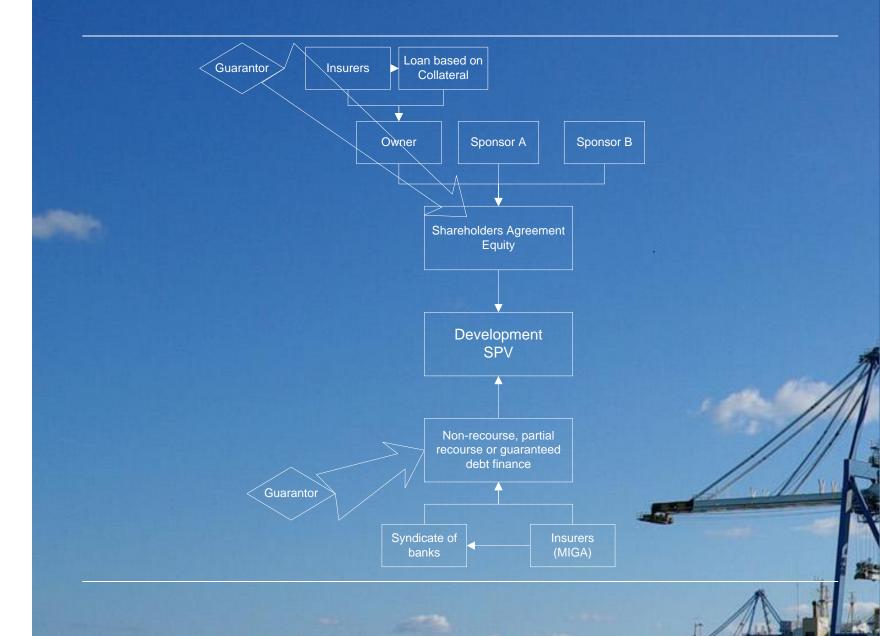


# Financial Structure/Business Model

- Local capital markets
  - Equity Market
  - Bonds
  - Banks
  - Infrastructure funds
  - Private investors (major and small)
- International capital markets
  - Banks
  - Bonds
  - Infrastructure investors
- Multi-lateral institutions
- Bilateral aid
- Government...
- Construction financing...

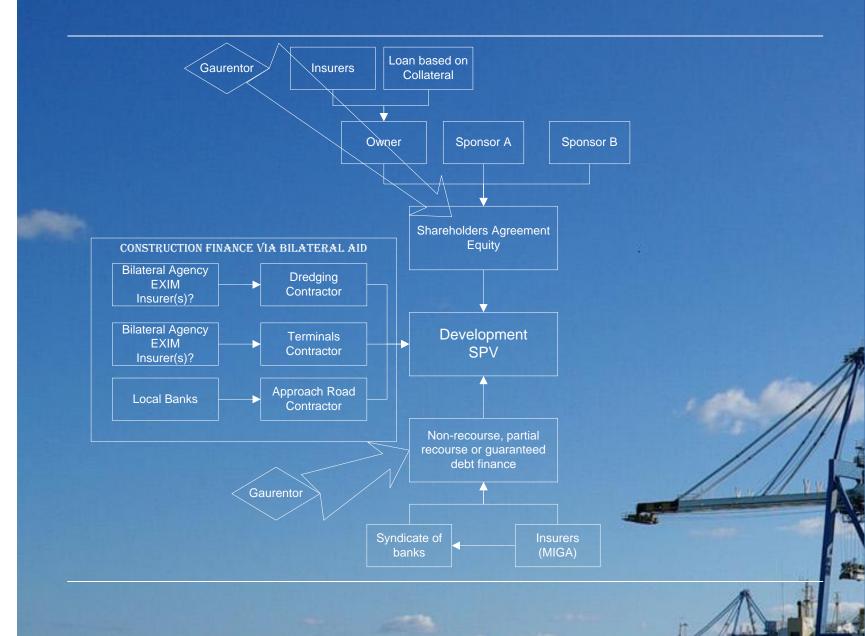


# Financial structure – stage 1



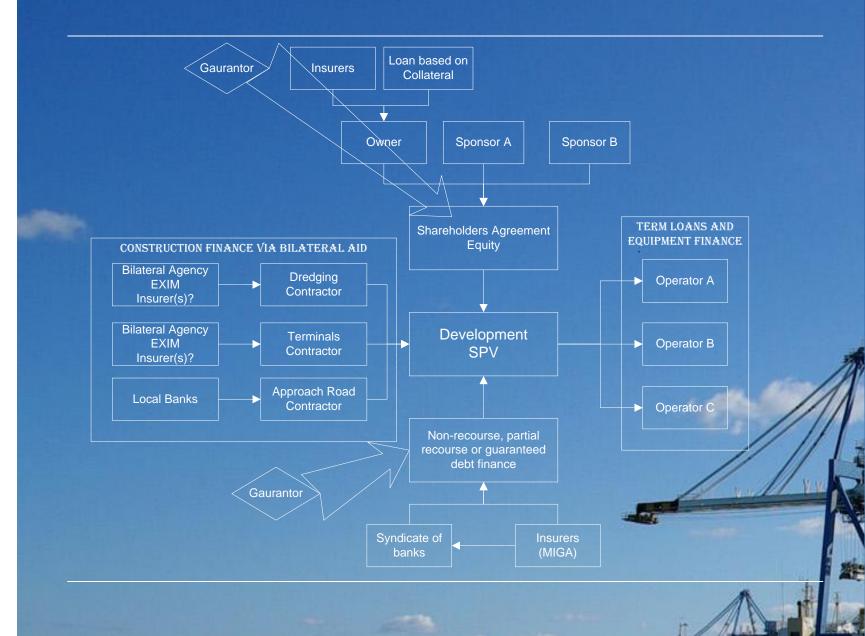


### Financial structure – stage 2





### Financial structure – stage 3



# **Financial Model**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	202
liscellaneaous													
usiness Tax													
isurance						3,356	5,824	7,529	9,453	11,623	14,070	14,669	16,80
lanagement Contract						6,712	11,648	15,058	18,906	23,247	28,141	29,339	33,61
and Tax						100	100	100	100	100	100	100	10
ixed Lease													
erfromance Lease						13,423	23,295	30,115	37,811	46,493	56,281	58,678	67,22
otal						23,590	40,867	52,801	66,270	81,463	98,592	102,787	117,74
verall Cost Summary													
perations					206	35,081	57,943	72,392	88,757	105,937	125,925	128,588	143,59
liscellaneous						23,590	40,867	52,801	66,270	81,463	98,592	102,787	117,74
otal					206	58,671	98,810	125,193	155,027	187,400	224,518	231,374	261,34
&L Account													
evenue						134,230	232,954	301,149	378,114	464,929	562,811	586,778	672,2
perating Costs					206	58,671	98,810	125,193	155,027	187,400	224,518	231,374	261,3
perating Profit					-206	75,558	134,144	175,956	223,087	277,529	338,293	355,404	410,9
epreciation	12,500	37,500	62,500	87,500	102,000	110,936	123,649	134,090	143,880	154,343	165,771	175,404	184,3
зіт	-12,500	-37,500	-62,500	-87,500	-102,206	-35,377	10,496	41,866	79,207	123,186	172,522	180,000	226,5
bt Charges (interest)			32	72	112	136	148	155	158	161	159	162	1
зт	-12,500	-37,508	-62,532	-87,572	-102,318	-35,513	10,348	41,711	79,049	123,026	172,363	179,839	226,4
orporate Tax Rate	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	
ax Paid							724	2,920	5,533	8,612	12,065	12,589	15,8
et Profit	-12,500	-37,508	-62,532	-87,572	-102,318	-35,513	9,624	38,791	73,516	114,414	160,298	167,250	210,5
nancial Projections													
oject DCF													
scount factor	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	1(
scount Index	1.000	0.909	0.826	0.751	0.683	0.621	0.564	0.513	0.467	0.424	0.386	0.350	0.3
evenues	0	0	0	0	0	134,230	232,954	301,149	378,114	464,929	562,811	586,778	672,2
vestment Plan	500,000	500,000	500,000	500,000	80,000	255,208	208,362	164,382	178,132	182,232	206,306	111,736	176.8
perating Costs	000,000	000,000	000,000	000,000	206	58,671	98,810	125,193	155,027	187,400	224,518	231,374	261.3
ix Paid	0		0	0	0	00,071	724	2,920	5,533	8,612	12,065	12,589	15.8
								2,020	0,000	0,012	12,000	.12,000	//
et Cash Flow	-500,000	-500.008	-500.032	-500,072	-80,318	-179,786	-75,090	8,499	39,264	86,524	119,763	230,918	218,0
CF	-500,000	-454,553	-413,250	-375,711	-54,858	-111,633	-42,386	4,361	18,317	36,695	46,174	80,935	69,4
	000,000	101,000		010,111	01,000		12,000				10,111		11
uity Cash Flow	-700,000							8,499	39,264	86,524	119,763	230,918	218.0
CF for Equity	-700,000							4,361	18,317	36,695	46,174	80,935	69,4
	-700,000										6	00,000	
Costs % of Revenue						44%	42%	42%	41%	40%	40%	39%	39
								12,0		604	10,0	00,0	0.
	2 156 032 <b>R</b> (	ough FMV			10 49%/IR	R over 25 ye	ars		16 52% E	quity IRR ove	er 25 vears		
	2,130,0321				10.49%11				10.52 %		. 10 yours		
0.83%Annual Rate of Return					166,522NPV @ 10 % over 25 years 1,418,913Equity NPV @ 10% over 25 years					vears			

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# Summary on focus of pre-feasibility

- The market...
  - Access
  - Sustainability
  - Volumes
  - Rates
- CAPEX
  - What is sensitive and what is not
- Financial Structure
  - Business Model
  - Partners
  - How you fund
- and the others...
  - OPEX
  - Tax, regulation etc...



# Thank you for your attention