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LOGISTICS CLUSTER DEVELOPMENT OPPORTUNITIES IN GEORGIA

Agenda

- Georgia – Untapping Grate Development Potential
- Logistics cluster in Georgia
- European logistics market
- Defining logistics cluster parameters in Georgia:
 - ▶ Cluster composition options
 - ▶ Investment criteria
 - ▶ Cluster geography
 - ▶ Cluster components
- Specific opportunities in cold storage and food wholesale

Untapped Potential

Defining Cluster Parameters

Cold Storage Opportunities

Cooperation

Competitiveness & Trade

- **Georgia has significant negative trade balance with higher ranked trade partners**



Source: National Statistics Office of Georgia - GeoStat

Transport Trends

Multinational companies investments and development efforts in pipeline and air transport resulted in sustained growth

Huge untapped Potential

- There is a very significant untapped potential in marine, cargo storage and handling and air cargo logistics.
- Georgia-Turkey railway expected completion in 2013 will open another efficient transportation possibilities
- Marine and railway development will stimulate road transport and logistics centers development.
- Transport system development will significantly improve Georgia's products cost competitiveness.
- Azerbaijan develops ports in Caspian Sea aiming to handle more than 1 mln. TEU per year by 2020

Transport and Logistics	Current contribution to GDP, USD Mil	Target contribution to GDP in 2020, USD Mil	Financing estimate, 2016-2020, USD Mil
Marine	0	2,000	1,500
Road	223	2,000	2,000
Railway	42	400	500
Air	34	1,600	1,000
Cargo handling and storage	148	2,000	2,500
Other supporting transport activities	141	800	250
Travel agencies, tour operators; tourist assistance	187	600	150
Total	776	9,400	7,900

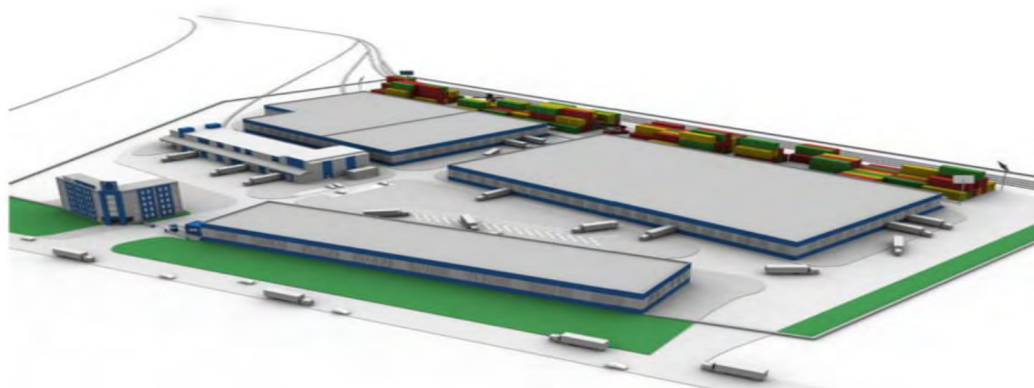
Marine Transport Development Potential

- Growth potential is huge when starting from zero
- Georgia still has experienced and qualified Marine personnel, history of shipbuilding and operating significant fleets

Marine Transport	Current Fleet, Quantity	Investment estimates, USD Mil	Estimate Annual revenues, USD Mil	Estimated payback period, Years
Container Ships, TEU	0	200	250	4-5
Tanker, DW	0	70	100	4-5
Dry Bulk Cargo Ships, DW	0	60	40	5-10
Fishing Vassals, t.	40 (120t.)	70	100	1-3
Total		400	490	

Dry warehouse and wholesale center, Sample Project

- Warehouse and container terminal
- Total area – 18,4 ha;
- A Class Warehouse – 64 300 sq.m.
- Cold Storage - 9200 sq.m.
- Container terminal – 2 200 TEU
- Total storage area – 100 000 Pallets



Regular traffic to improve the route reliability, reduce costs and attract new cargo, concept

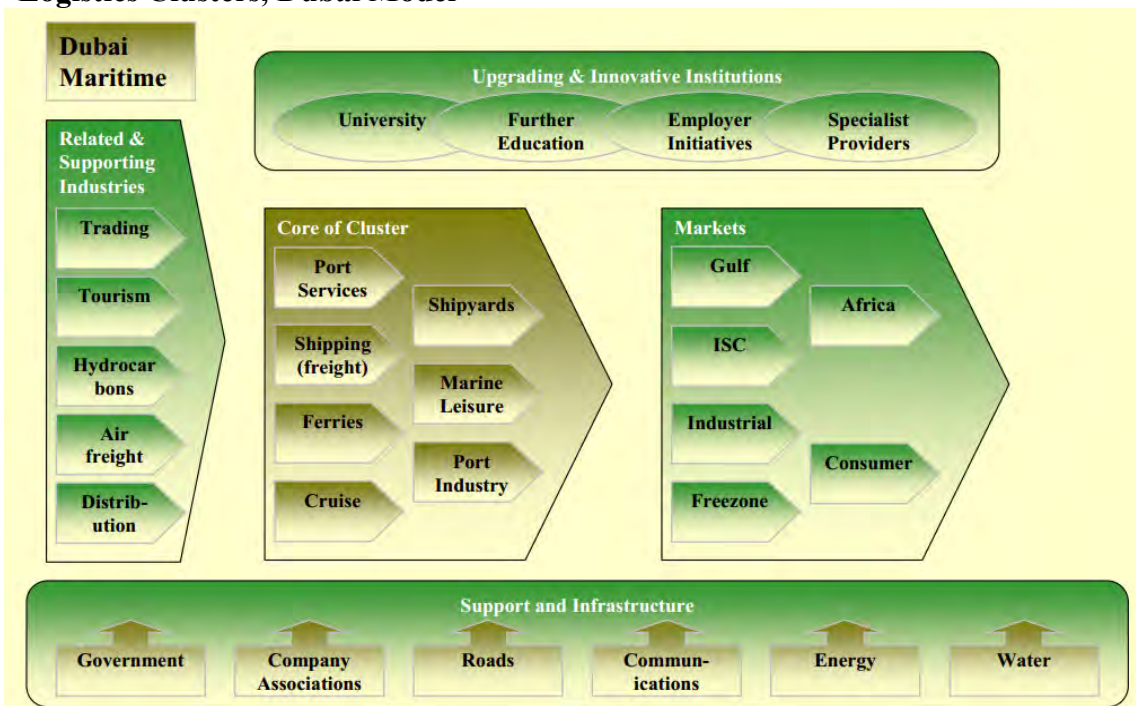
- Poti- Alexandroupolis-Genoa–Marseille – regular frequency traffic
- Inter black sea regular traffic



Logistic Clusters



Logistics Clusters, Dubai Model



Logistics Clusters, London Maritime Model



Logistics Clusters, Netherlands

KEY FIGURES UTRECHT

TOTAL STOCK (SQ M)	595,000
ADDITION 2006-2010	7%
RENTAL SHARE	62.2%
ANNUAL DEMAND 2006-2010 (SQ M)	30,000
AVAILABILITY	6.4%
MARKET RENTS (€ / SQ M / YEAR)	45 - 60

CONTAINER ACCESSIBILITY

CAR	A2, A27, A12 MOTORWAY
TRAIN	N/A
BARGE	CONTAINER TERMINAL UTRECHT

KEY FIGURES ROTTERDAM

TOTAL STOCK (SQ M)	1,365,000
ADDITION 2006-2010	19%
RENTAL SHARE	68.7%
ANNUAL DEMAND 2006-2010 (SQ M)	88,500
AVAILABILITY	8.9%
MARKET RENTS (€ / SQ M / YEAR)	40 - 62.50

CONTAINER ACCESSIBILITY

CAR	A13, A15, A16, A20 MOTORWAY
TRAIN	PORT OF ROTTERDAM; SEVERAL TERMINALS
BARGE	PORT OF ROTTERDAM; SEVERAL TERMINALS

Logistics Clusters

Singapore – In 1965 Singapore was separated from Malaysia and lost its hinterland. In order to compete, Singapore redoubled its focus on trade and developed a re-export-oriented manufacturing economy, requiring efficient port operations, continuing Singapore's role as entrepôt for Southeast Asia (about 85% of the containers that come to the Port of Singapore never enter the country and over half of the remaining material leaves Singapore as re-export). The Singaporean Port Authority (PSA) kept investing in automation, leading to continuous optimization of port services, reducing time and cost to its tenants. Today, Singapore is the world's busiest container port.

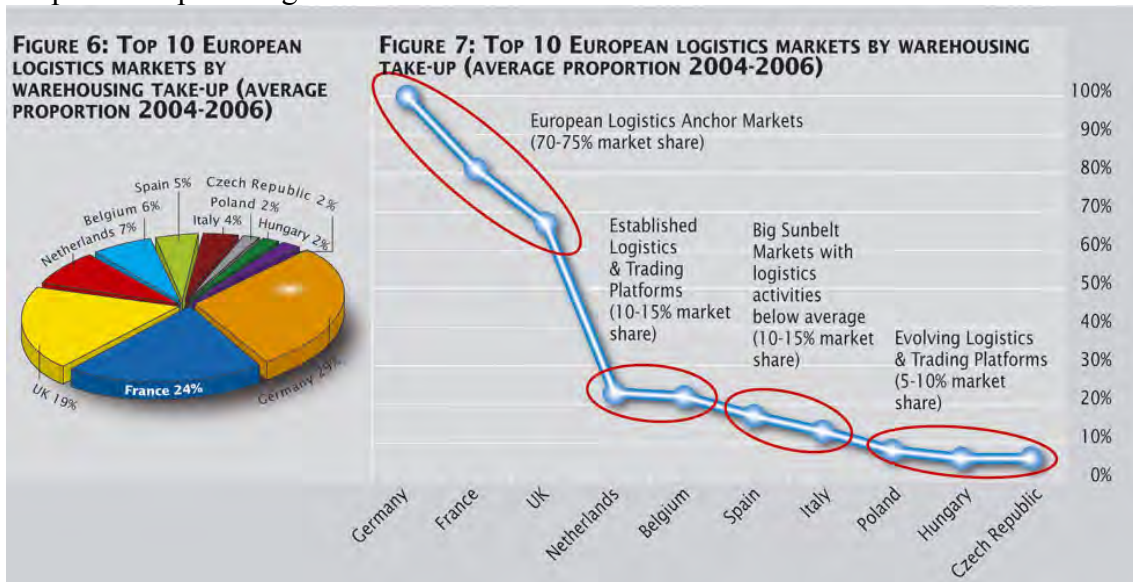
Holland - Like Singapore, re-exports constitute a large fraction of total Dutch export – in this case close to 50%. Rotterdam is the largest container port in Europe but the entire Dutch logistics corridor stretching from Rotterdam, to Brabant, Breda and Fresh Park Venlo on the German border is actually a logistics cluster.

Zaragoza – PLAZA is the largest logistics park in Europe. You are all familiar with it. Geographically it is nearly equidistant from Madrid, Barcelona, Valencia and Bilbao, and it is an inland port between the Atlantic and the Mediterranean. The Aragón logistics cluster, however, is more extensive than just PLAZA. It includes facilities in Truel, Huesca, and Fraga, in addition to related private developments.

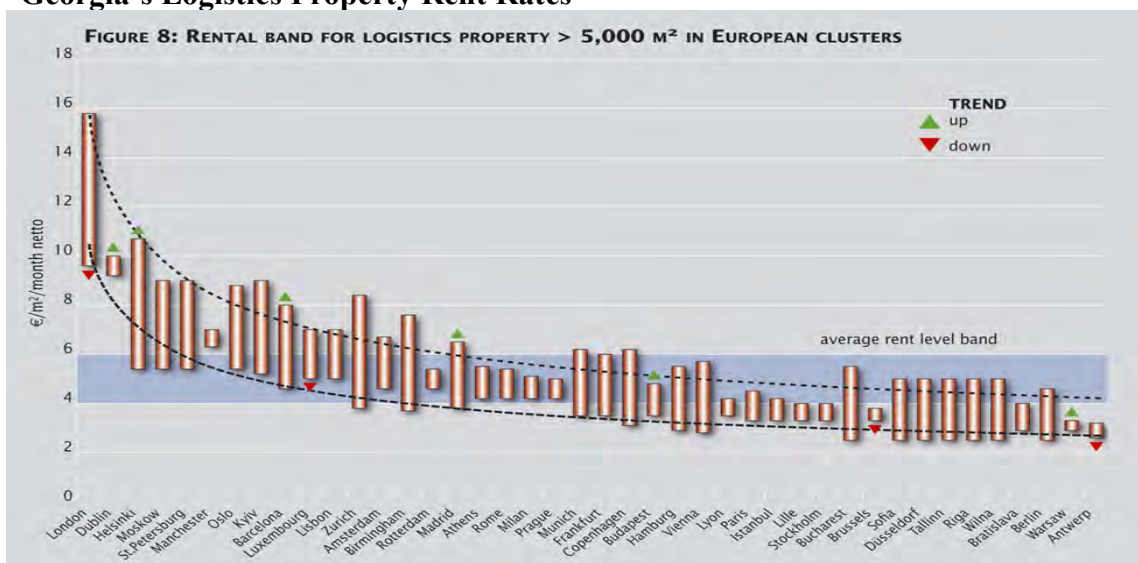
Memphis – FedEx’s move to Memphis has cemented the city’s role as a US logistics center. Memphis’ geography and climate are central to its role as the biggest cargo airport in the world. But Memphis is also a major railroad center: all five US Class I railroads have facilities there. And it is home to over 400 trucking companies and a river port on the Mississippi River. Thus, Memphis is a quadra-mode logistics cluster.

Chicago – Chicago has developed into a trading hub thanks in large part to its location at the edge of the Great Lakes. The railroads were developed to connect the lakes’ shipping lanes to the West, thus connecting the US East Coast to the US hinterland. The Eastern railroads then followed, making Chicago a railroad hub, an inland port and a huge logistics cluster. Today Chicago is still home to the commodities exchange and the largest inland port in the world.

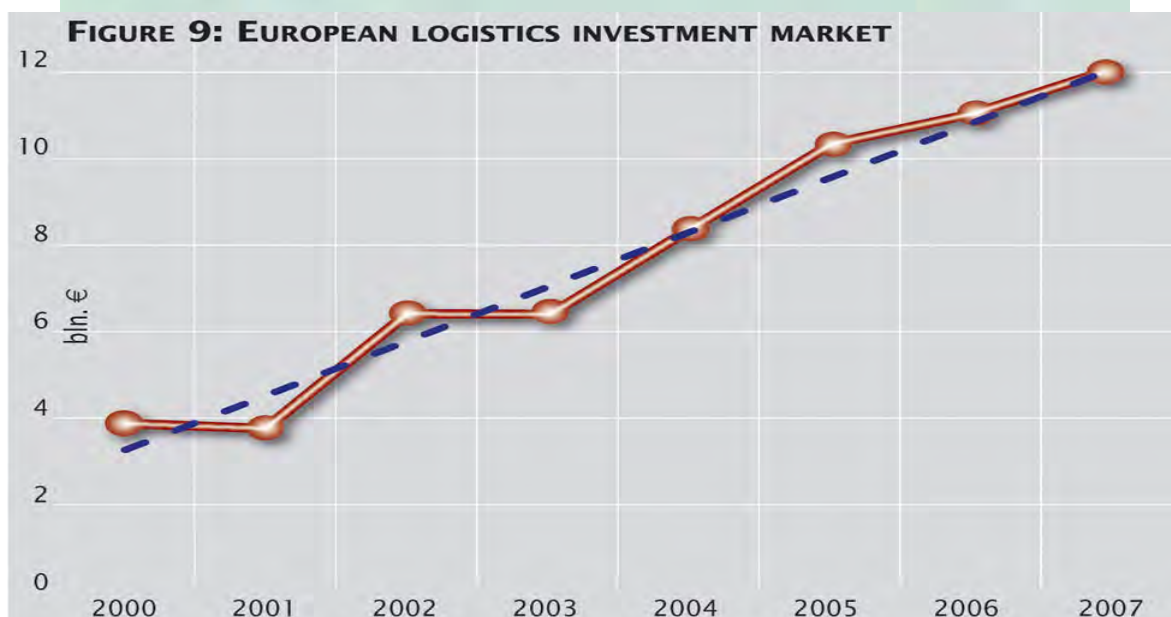
Top 10 European Logistics Markets



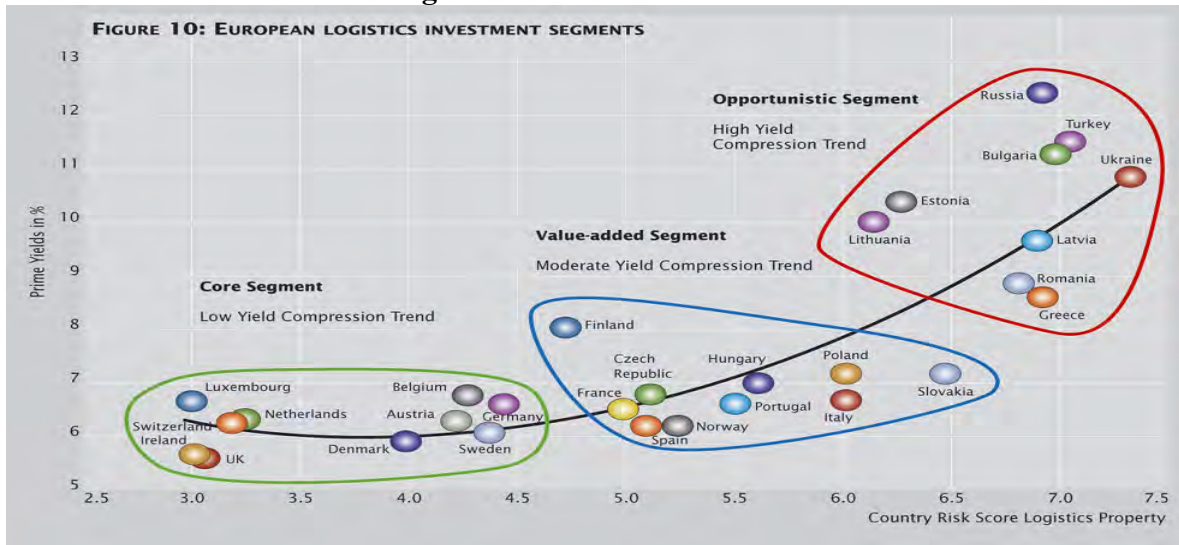
Georgia’s Logistics Property Rent Rates



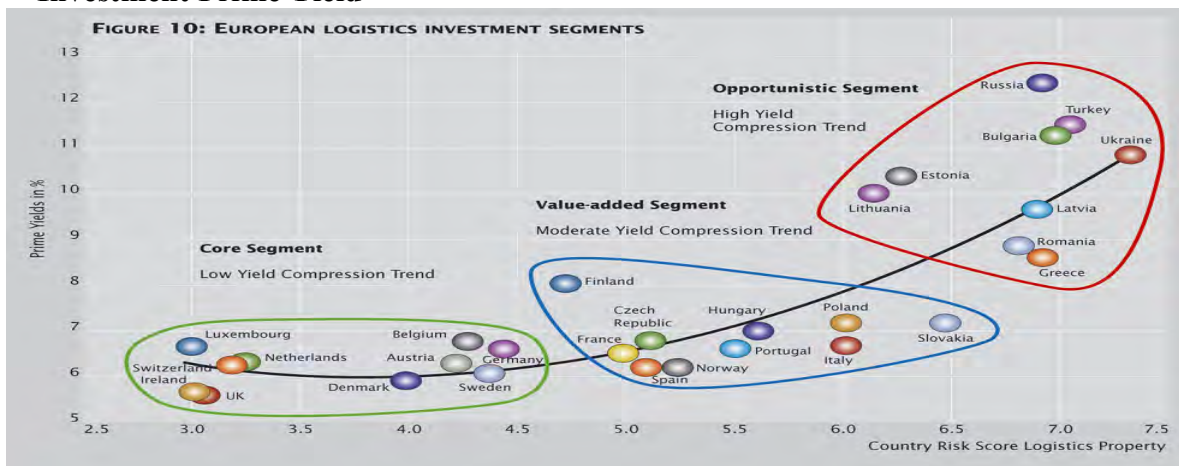
Investment Trends in European



Investment Prime Yield Targets



Investment Prime Yield



European Warehouse Investor Typical Investment Criteria

- Categorizing the investors is difficult, because they are heterogeneous by both type and origin.
 - Foreign buyers dominate the market. Half of them were UK-based.
 - The main part of the transaction volume, however, is generated by asset managers concentrating on distribution warehouses by offering specialty funds.
 - Investors who neither used the warehouses themselves nor developed them are accountable for a quarter of the transaction volume
 - On the supply side the corporate owners are the largest vendor group by generating half of the total transaction volume
 - Investors prefer new or as-new warehouse complexes with a usable floor space of 10,000 m² and upwards.
 - Most investors prefer a low to moderate risk range.
 - The target property should normally include integrated office share between 5% and 15%.
 - A clear height (under girder) in the warehouse not less than eight meters, good access options and excellent transport links.
 - The lease contract term should be at least five years, which is usually influencing together with the solvency of the main tenant, the ultimate investment decision.

Cold chains play an important role in fruits and vegetables processing and handling around the world

Wholesale Centers	Country	Established	Area (thousand sq. m.)
Sidney Market	Australia	1987	673
Mercasevilla S. A.	Spain	1971	444
Berliner Grossmarkt	Germany	1975	330
Maryland Food Center	USA	1967	330
Grossmarkthalle Munhen	Germany	1912	310
Grossmarkt-Hamburg	Germany	1962	268
Rungis	France	1967	230
Mercamadrid	Spain	1982	176
Corporacion del Mercado central de Buenos Aires	Argentina	1984	127
Velikopolska Gielda	Poland	1992	120

Creating Agro Logistics Clusters, Poland

BRONISHE	
Main Products:	Fruits And Vegetables
Statistics:	
Turnover (Ton)	No Data
Turnover (Euro)	No Data
Total Area (m ²)	62 000
Used Area (m ²)	11 181
Area With Climate Control (m ²)	5 550
Chilled Storage (m ²)	No Data
Area For Packaging (m ²)	30 000
Infrastructure:	
Bank	a <input type="checkbox"/>
Currency Exchange	a <input type="checkbox"/>
Customs Post	No Data
Quality Control	No Data
Loading Zone	a <input type="checkbox"/>
Transport Companies	No Data
Special Storage For Exotic Fruits	r <input type="checkbox"/>
Other	Coffee Shop, Bar
Lease Area:	
Average Area Per Month (m ²)	9 - 90
Telephone	a <input type="checkbox"/>
Electricity	a <input type="checkbox"/>
Water	a <input type="checkbox"/>
Office Equipment	a <input type="checkbox"/>

Creating Agro Logistics Clusters, Romania

BUCHAREST	
Main Products:	Fruits, Vegetables, Meat, Dairy Products
Statistics:	
Turnover (Ton)	292 000
Turnover (Euro)	2 100 000
Total Area (m ²)	300 000
Used Area (m ²)	21 000
Area With Climate Control (m ²)	570
Chilled Storage (m ²)	2 100
Area For Packaging (m ²)	52 000

Infrastructure:	
Bank	a <input type="checkbox"/>
Currency Exchange	a <input type="checkbox"/>
Customs Post	a <input type="checkbox"/>
Quality Control	a <input type="checkbox"/>
Loading Zone	a <input type="checkbox"/>
Transport Companies	a <input type="checkbox"/>
Special Storage For Exotic Fruits	a <input type="checkbox"/>
Other	Different Services For Farmers
Lease Area:	
Average Area Per Month (m2)	60
Telephone	a <input type="checkbox"/>
Electricity	a <input type="checkbox"/>
Water	a <input type="checkbox"/>
Office Equipment	r <input type="checkbox"/>

Creating Agro Logistics Clusters, Hungary

BUDAPEST	
Main Products:	Fruits, Vegetables, Eggs, Honey
Statistics:	
Turnover (Ton)	400 000
Turnover (Euro)	No Data
Total Area (m ²)	350 000
Used Area (m2)	4 200
Area With Climate Control (m2)	No Data
Chilled Storage (m2)	830 (own)
Area For Packaging (m2)	33 000
Infrastructure:	
Bank	a <input type="checkbox"/>
Currency Exchange	r <input type="checkbox"/>
Customs Post	a <input type="checkbox"/>
Quality Control	a <input type="checkbox"/>
Loading Zone	a <input type="checkbox"/>
Transport Companies	a <input type="checkbox"/>
Special Storage For Exotic Fruits	a <input type="checkbox"/>
Other	Restaurant, Shops For Farmers
Lease Area:	
Average Area Per Month (m2)	100
Telephone	a <input type="checkbox"/>
Electricity	a <input type="checkbox"/>
Water	a <input type="checkbox"/>
Office Equipment	r <input type="checkbox"/>

Creating Core of Logistics Cluster - Cold Storage - Business Model and Functions

Development of modern wholesale centre will ensure efficient supply of Tbilisi and Rustavi markets with quality fresh fruits and vegetables year round

- Staged development
- 1st stage:
 - Main cold storage facility development;
 - Transportation logistics unit formation;
 - Trading.

- 2nd stage:
 - Facility expansion;
 - Regional facilities establishment;
 - Export development.

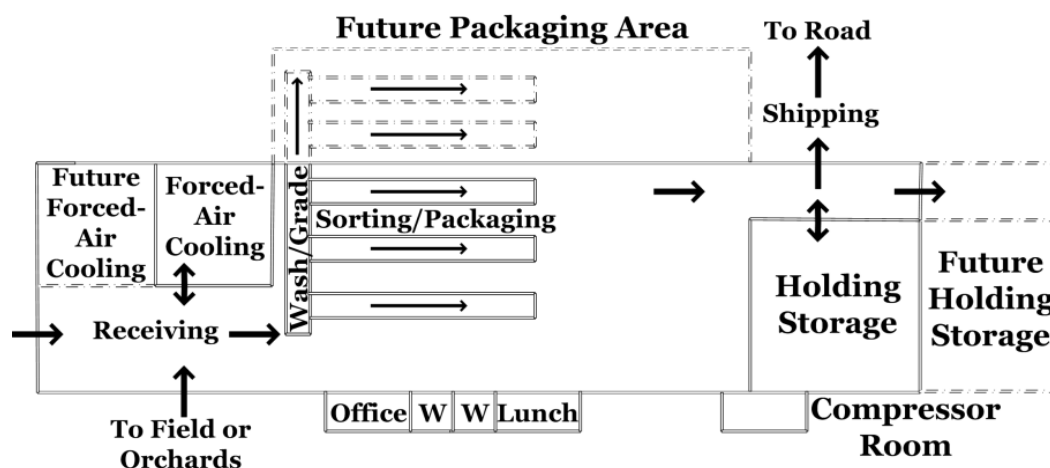
Selecting products and timing for storage and selling – Trading operations

Products	Storage Start	Selling
Potato	Sep-Oct	Apr-Jun
Carrot	Sep-Oct	May-Jun
Apple	Oct-Nov	Apr-Jun
Grape	Sep	Dec-Jun
Pomegranate	Oct-Nov	Mar-May
Citrus	Nov-Dec	Apr-May

Products	Break-even price* in CS, USD/t	Offseason Wholesale Price, USD/t
Potato	422	531
Carrot	483	681
Apple	427	1,294
Pomegranate	610	1,422
Grape	467	1,388
Mandarin	410	771
Orange	450	1,018
Lemon	435	935

Cold Storage Facility Concept

Key Characteristics	
<i>Installed capacity</i>	4,700 ton
<i>Land plot</i>	3 ha
<i>Facility Height (m)</i>	9.5
<i>Total area (m²)</i>	5,200
<i>Receiving</i>	300
<i>Precooling (2 rooms)</i>	130
<i>Washing and Grading</i>	300
<i>Sorting and Packing</i>	300
<i>Storing</i>	3,600
<i>Dispatching</i>	300
<i>Office Area</i>	300
<i>Utilities</i>	
<i>Electricity Load (Kw)</i>	1,100
<i>Civil engineering</i>	
<i>Road Connection</i>	
Local road with connection to arterials or freeways	
<i>Railway Connection</i>	
(Optional)	



Tbilisi East (Gachiani or Lilo) Advantages

- Direct railway link to Azerbaijan, Armenia, black sea ports of Georgia and Turkey (Europe, the line is scheduled to be completed in 2012);
- Within 20km from Tbilisi International airport providing air cargo possibilities;
- Tbilisi and Rustavi area comprise 31% of fruit and vegetables consumption and more than 60% of imported fruit and vegetables consumption.

Sites	Consumption	Production	In county logistics	Export logistics
Tbilisi East	5	5	5	5
Tbilisi West	5	4	4	4
Khashuri	3	3	4	3
Kutaisi	3	3	3	3
Poti	2	2	5	5

Cold Storage in Georgia Greenfield Investment Opportunity

Project Overview

Partnership Fund, an investment fund of the Government of Georgia, is inviting strategic investors to co-invest in a USD 7 mil. Greenfield project aiming at development of 4,700t Capacity Fruit and Vegetables Cold Storage serving 1.2 mil. population of Tbilisi and Rustavi with quality fresh fruits and vegetables year round. Co-investment and support for setting up the project will be facilitated by Partnership Fund.

Financing

- The Investor's contribution in the amount of 25% of financing needed in common equity
- Fund's matching contribution through sub-debt or common equity
- Debt financing in the amount of 50% of total financing need, that can be acquired in Georgian market with assistance of Partnership fund

Estimated Investment Return Indicators (USD mil.)	
Project NPV	1.5
Project IRR	16%
Equity Holder's IRR	21%
Payback Period	6 Yrs.

Estimated Start-up Costs (USD mil.)	
Equipment	3.4
Land	0.3
Buildings	2.2
Other	0.6
Working Capital	0.5
Total	7.0

Projected annual performance at full capacity (USD mil.)	
Revenue	4.0
COGS	1.5
General & Admin	0.3
Depr. Interest & Tax	0.5
Net Profit	1.7
EBITDA Margin %	55%