SHAPING A NEW AGENDA FOR MARGHERA: BACK TO THE FUTURE

MARGHERA 100, VENEZIA 50
Marghera again at the right place at the right time

50 years past the "aqua granda" flooding of November 4th, 1966, and 100 years since the signing, on 23rd July 2017, of the Agreement between the City of Venice and the National Society of the Venice Industrial Port, aiming at "promoting the localization of electrical, metallurgical and naval companies in Porto Marghera",

**Venice and Porto Marghera confirm to be in the right place at the right time** (again) to attract foreign investments and boost the economy of the Country like in the XX Century.
Marghera Industrial Port Evolution

1903-1915
1916-1929
1930-1939
1955-1990
1965-1972
1909-1916
depth 7 m
1915
depth 10 m
1915
depth 11 m
XVIII-XIX sec.
derth 4.50 m

Marghera port evolution
MARGHERA 100, VENEZIA 50: what’s next?

In the XX Century, Venice–Marghera port worked as *mine-mouth* for a wide range of heavy industries of the area to supply raw materials from over-seas.

Venice Marghera was based on 3 main pillars:
- Low cost electricity;
- Wide industrial/port areas with sea access for industrial plants development;
- Low-cost labour force.

Today, 2 out of 3 pillars have gone.

Only the proximity to the sea lasts (hence it is the closest point to the overseas markets, the most important for the export-driven Italian and European manufacturing companies).

From this starting point, we have the opportunity to face a very special case of port industrial area conversion.
Why Marghera can be considered a very special case of port industrial area conversion?

1. Area size

For the involved area size (at least 1500he not considering the intra-port channels) and for the infrastructural assets therein accumulated in over 100 years
One of the world’s largest areas convertible to logistics
Why Marghera can be considered a very special case of port industrial area conversion?

Waterfront length

For the length of the possible waterfront (33,6 kilometers of environmental embarking of quays along the channels of the so-called oil, commercial and industrial ports)
Why Marghera can be considered a very special case of port industrial area conversion?

3. Confirmation of port vocation

For the reconversion aims that does not point to the abandonment of port and industrial destinations and to the transition to urban and tourist destinations [except for the over North Channel and over the West Channel areas that have already acquired urban functions, as you can see in the picture below]
The new MoS terminal in Fusina

TERMINAL MoS > 36 HECTARS

55.400.000 €
CLEAN UP OF ASBESTOS, CONTAMINATED SOIL AND GROUNDWATER

The biggest asbestos clean up in Europe -> 8 M €
In the last years the Port of Venice made important investments on rail and road connections to enhance its main feature of being the European door to and from the Mediterranean and Far East markets.

The new Motorways of the Sea Terminal in “Fusina”

- 2 Basins and 4 berths for Ro-Ro /Ro-Pax
- 36 hectares of Logistics Platform
- Dedicated rail yard with 4 tracks for trains up to 650 mt / up to 6 pair of trains a day (upgrading ends in 2018 and will serve up to 10 trains /day)
- Fast Motorways and railways connections
- Operating since June 2014
Why Marghera can be considered a very special case of port area conversion and coastal industry?

4. Rebalance the tourism focus

This conversion radically changes the economic base of the Venice metropolitan area, the Venice “civitas” of these days, rebalancing the excess of tourist specialization.

**METROPOLITAN CITY (including MARGHERA)**
assets of a potential new global centrality beyond tourism: airport (accessibility worldwide), port (“port-centric manufacturing and logistics”- Marghera)

**FUNCTIONAL CITY**
wider area which the “historical city” is (or used to be) the center of; the “historical city” from historical center to “historical tourist district”

**LAGOON CITY**
environmental heritage to be actively preserved

**HISTORICAL CITY**
cultural heritage to be passed down to future generations (a given stock or a stock open to new elements?)
The contemporary Venetian *civitas* alone is not capable of supporting the weight of the *urbs* preservation.

This ability will depend in the near future from the local capacity of handling the current transformation of the economic base of the functional and metropolitan cities towards:

- A sustainable tourism (*exported to the world community*);
- A non-tourism activity in the “historical Venice”;
- A port-centric transformation of manufacturing and logistics in the “functional city”;
- A global accessibility related activities around airport and port;
- Public money coming from the Italian Government.
Why Marghera can be considered a very special case of port industrial area conversion?

5. An unique innovative port machine

For the reconversion characteristics aiming to the realization of an innovative port machine capable of giving to the Port of Venice a role of national, European and international importance and, as a result, to the readaptation of areas used for 100 years for the coastal based industry (metallurgical and petrochemical) the reception of a cluster of activities that will vary from manufacturing to semi-manufacturing and to logistics.
VIDEO: How to turn a problem into an opportunity with VOOPS

MEGA CARGOES PORT LOGISTICS IN EUROPE

HOW TO TURN A PROBLEM INTO AN OPPORTUNITY WITH VENICE
OFFSHORE ONSHORE PORT SYSTEM
Demand plausibility

Marghera confirm to be at the right place at the right time, as a consequence of:

- the increasing commercial integration of countries in different continents along with the manufacturing re-shoring/back-shoring trends;

- the fact that intra EU trade will be taken over by extra EU trade by 2027;

- ports are main gateways to/from overseas markets (the most important markets!);

- model trend in developing port-centric based logistic system, where productive and manufacturing activities are concentrated within the port areas, besides the traditional handling and storing activities, with advantages in the management of complex and cross-country organized logistic chain, allowing for a value chain higher efficiency, and in turn a cost reduction (best cost/time ratio to connect shortest route of point of origin and destination of the trade flows);

- Asian central role in the global economy and the increasing importance of the maritime relationship between Europe and Asia and the chinese view: the 21st Century Maritime Silk indicate Venice as Western terminal and the minimum Asia-Europe path;
Supply plausibility

The decoupling between activities in the offshore terminal (megaships deconsolidation/consolidation of megacargoes) and those carried out in the lagoon port (no need of channels deepening over the -12 m) in Marghera areas, as the first onshore terminal, makes it possible to accommodate larger traffic volumes and, at the same time, protect the environment.

Offshore container and energy terminal

Breakthrough innovations: Mama Vessel and Cassettes
North Adriatic: 1 Sea, 2 complementary Markets

Venezia (Italy)
Trieste (Italy)
Koper (Slovenia)
Rijeka (Croatia)
Ravenna (Italy)

50 Nautical miles
Distribution of mega ships cargo in North Adriatic

«ONE CALL»
OFFSHORE-ONSHORE INNOVATIVE WESTERN ADRIATIC TERMINAL MODEL

- VENICE MARGHERA (ONSHORE TERMINAL)
- CHIOGGIA (ONSHORE TERMINAL)
- RAVENNA (ONSHORE TERMINAL)

«MULTI CALL»
TRADITIONAL EASTERN ADRIATIC TERMINAL MODEL

- TRIESTE
- KOPER
- RIJEKA

MEGA SHIPS 18,000/22,000 TEUs
Adapting to the «one-call» offshore-onshore innovative model: Port of Venice
MonteSyndial Terminal

> 1,400,000 TEU/year
> 1,600 mt berths
> 90 hectares
> New rail park
The layout is a typical RTG layout with the feeder berth next to the barge berth, sharing the crane rails and allowing extra berthing space for mooring of additional barges, larger feeders and the barge carriers. Phasing will occur from the deep end to the east to the more shallow area. In the areas of soft reclamation soil we have allocated empty storage.
Megaports and the handling of Megacargoes

The Rotterdam case

To avoid congestion approaching the harbor, the departing cargo will arrive by road or rail only up to Alblasserdam (61 km from Maasvlakte) where the containers will be transferred on barges that will take them to the mega ships (exactly the same logic of the offshore/onshore system designed for Venice!)
Venice Offshore Onshore Port System (VOOPS) Supporting the North Adriatic gateway full development

The geographical advantage of the North Adriatic multiport gateway system, will let the ports successfully compete on central and eastern European markets **only if, in terms of container market**, the scale of activity grows at least 3 times than the present handled volume, i.e. from 2 to at least **6 million TEUs**, to be reached progressively within 2030 (completion of Core TEN-T Network)

This is an achievable target if the North Adriatic Ports will exploit their full geographic potential covering a 300-degree market, from Rome to Sarajevo, via Milan, Lyon, Basel, Munich, Vienna, Budapest, Ljubljana, Zagreb and Belgrade.

Any delay in enlarging North Adriatic port capacity will let the South European logistic system remain “child of a Lesser God” and deeply affect the competitiveness of the EU factories on the world markets
VIDEO: The Venice Offshore Onshore Port System (VOOPS)
This port development is intended to be a catalyst for Marghera of the relocation of port-centric manufacturing industries processes (factories need to get closer to the supply markets and to the increasingly growing overseas destinations) and logistics nodes.

This transformation phenomenon is already taking place as you can observe from the employment graphs of industrial and oil sectors:

*Logistics activities, transport and services: 8,605 on a total of 13,198

Employees comparison between various sectors in the Marghera industrial area 1965-2011 (source Ente Zona Industriale Venezia - APV elaborations)
New port-industrial-logistic alliance supported by Venice Offshore Onshore Port System (VOOPS)

**Marghera is the perfect candidate for «port-centric» development model** and it will be at full potential only when the VOOPS project will be operational, **in compliance with the Government’s obligations** to restore nautical accessibility to the Port of Venice reduced due to MoSE barriers and safeguarding protocols.
CRUISES IN VENICE
n.1 HOME PORT IN THE MEDITERRANEAN
PORT OF VENICE TODAY: 2 SEPARATE ACCESSES AND ROUTES FOR CARGO AND PASSENGER SHIPS
What is the link between Marghera and the cruise port?

The Marghera reality is also linked with the urgent solution for the development of the cruise port.

In the medium term, the solution is the new Tresse Channel to get to the cruise terminal through the Malamocco inlet, along the channel Malamocco-Marghera up to a point that minimizes the interferences with the commercial traffic and the overstep of the Tresse island to reach the junction between the Malamocco-Marghera and the Vittorio Emanuele channels.

In the long run, which is characterized not only in terms of time but also in terms of new solutions needed for the cruise industry that should be accompanied by significant new investments in infrastructures, more than one solution are being considered in the review of Port Master Plan but no-one of them close to the Marghera cargo port/logistic areas.
New Tresse channel

- Marittima Cruise Terminal
- Lido Inlet
- Malamocco Inlet

- Industrial port area limit
- Main port channels

New Tresse channel
CURRENT SITUATION : TRESSE ISLAND
NEW «BIVI» RAIL LINK MARGHERA MONTESYNDIAL AREA TO THE NATIONAL NETWORK
**Conversion of old industrial areas in sites for logistics uses inside National Site Interest in Venice (SIN)**

- **Purchase of disused industrial areas:**
  - Area Ex Montefibre: 65 ha
  - Area Ex As Syndial: 23.5 ha
ex Montefibre site: First step remediation project

- Main remediation process and plant area
- Surface soil removal action and disposing contaminated soil
02/08/2010 Enviroment Ministerial Decree authorizing Clean Up Project

10/2011 Start up clean up activities (total duration 5 yrs)

COSTS for First phase : 12 Mln Euros

28 Employees from previous industrial plant were occupied in these clean up project

Clean up activities for soil and ground water already awarded
Ex Montefibre: site characterization

Widespread presence of contamination by metals (Arsenic, Cadmium, Mercury, Lead, Copper and Zinc)

In the “central area” of the site found high concentrations of Mercury and Chlorinated Aliphatic compounds, sometimes two or three orders of magnitude higher than the reference limits

The high concentrations of chlorinated aliphatic compounds in the central sector of the site are associated with the presence of an ancient riverbed, with the disappearance of the clay waterproof level (known as "Caranto")
Ex Montefibre site: remediation process

The remediation process tends to reach the limits established by current legislation and, however, in residual concentrations to enable the usability of the site.

Central sector (Mercury - organohalogenes)
realization of a system composed of a double belting associated with the in situ treatment of soils by means of the MPE and installation of a TAF for the treatment of groundwater.

Widespread contamination (metals, PAH):
elimination of the possibility of contaminant migration from the source to any external target area by interruption of the paths:
- surface soil removal action, asphalt and waterproofing;
- interventions phytostabilization;

Interventions removal and selective excavation limited to areas where planned construction and architectural works.
THANK YOU FOR YOUR ATTENTION!

Prof. Paolo Costa

President
Venice Port Authority

apv.presidenza@port.venice.it