



PORT Project, North Tyrrhenian Sea: Inter-territorial EU Project

CAGLIARI - SARDINIA

**Report from the
Future Think Tank workshop**



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PORT Project, North Tyrrhenian Sea: Inter-territorial EU Project

CAGLIARI, SARDINIA



Report from the Future Think Tank workshop
conducted on 2nd and 3rd March, 2015

PREPARED BY



future→iQ
PARTNERS



TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY	4
1.1	Background	4
1.2	Regional Surveys	6
1.3	Scenario Planning Process	6
1.4	Discussion on the regional scenarios	7
2.	INTRODUCTION	8
3.	BACKGROUND TO THE REGION	9
3.1	Social Aspects	9
3.2	Economic Aspects	12
3.3	Environmental Aspects	19
4.	REGIONAL SURVEYS	22
5.	SETTING THE STAGE – SCENARIO PLANNING	31
5.1	Scenario Planning Process	32
5.2	Why Scenario Planning?	34
5.3	Developing Four Plausible Scenarios for the Future	34
5.4	Creating scenario spaces – Four plausible scenarios for the future	35
5.5	Creating narratives for each scenario quadrant	35
6.	DETAILED DESCRIPTIONS OF THE SCENARIOS	38
6.1	Scenario A – +Cement, -Brains – 2030	38
6.1.1	+Cement, -Brains – Scenario Characteristics	39
6.1.2	+Cement, -Brains – Headline News from the Future	40
6.2	Scenario B – Door to the Mediterranean – 2030	41
6.2.1	Door to the Mediterranean – Scenario Characteristics	42
6.2.2	Door to the Mediterranean – Headline News from the Future	43
6.3	Scenario C – The Dreams Island – 2030	44
6.3.1	The Dreams Island – Scenario Characteristics	44
6.3.2	The Dreams Island – Headline News from the Future	46
6.4	Scenario D – Desert surrounding the Nuraghi – 2030	47
6.4.1	Desert surrounding the Nuraghi – Scenario Characteristics	47
6.4.2	Desert surrounding the Nuraghi – Headline News from the Future	49
7.	WORKSHOP PARTICIPANT FEEDBACK	50
7.1	Preferred Scenario - workshop participants	50
7.2	Which scenario most represents where the region is currently heading?	51
8.	HOW COULD THE PREFERRED FUTURE EVENTUATE?	52
8.1	Key Action Steps identified by participants	53
8.2	Next Steps in the action planning process	54
9.	FOR MORE INFORMATION	55
10.	CREDIT	57



1. EXECUTIVE SUMMARY

1.1 BACKGROUND

PORT Project, North Tyrrhenian Sea: Inter-territorial EU Project (E79F12000020007) is a strategic project funded by the cross-border cooperation operational Programme: Italy – Maritime France 2007-2013 – Priority 1: Accessibility (<http://www.maritimeit-fr.net/>).

The goal of the Programme Italy – Maritime France is to improve cooperation between border areas in the fields of accessibility, innovation, making the best use of natural and cultural resources, and the sharing of infrastructure and integrated services, so as to increase competitiveness at the Mediterranean, Southern European and World levels. The Programme involves the following regions of the Northern Tyrrhenian Sea, belonging to the Italian and French territories: Tuscany, Liguria, Sardinia and Corsica. Priority 1 – that co-financed the PORT Project – aims to improve access to physical and non-physical networks and transport services, so as to foster the closer integration of these networks and make them competitive.

The PORT Project has a total available budget of € 5.388.583,00 of which € 4.041.437,25 has been funded through the European Regional Development Fund. The Project seeks to overcome the low level of integration and relationship between cities and their ports both at the urban, economical and social level. Accordingly with its framework and in order to achieve its results, the PORT Project foresees one Systemic Action and two Sub-projects (Sub Project A - Enhance accessibility to ports through infrastructural interventions; Sub Project B Valorise local cultural heritage through integrated activities at local, regional, european and international level).

The Systemic Action “Institutional cooperation between portual cities” led by by ANCI Toscana (with the collaboration of OTC – Office des Transports de la Corse – Service des Liaisons Européennes, ANCI Liguria and ANCI Sardegna) has the main goal of



ensuring the implementation of a process of institutional cohesion for the creation of a stable network of port cities and coastal areas, primarily directed to define a shared cross-border Strategic Programme to promote and implement integration policies aimed at increasing competitiveness of the area. It aims to develop a common and sustainable strategically and institutionally driven development programme, through sharing successful and best practices in the field of urban policies.

A scenario planning methodology was introduced in four major 'Think Tank' sessions. This report will outline the results of the workshop in Cagliari, Sardinia, held on 2nd and 3rd March, 2015.

1.2 REGIONAL SURVEYS

- The majority of the responses from those surveyed in the regional survey indicated that the relationship of the port and the sea was highly important to their city and region.
- Respondents felt it was from somewhat important to highly important to develop and maintain a shared vision with the other port cities of the North Tyrrhenian Sea. However, only 30% of respondents felt that it was highly important to have a shared vision with the other port cities.
- People were more pessimistic about the region's economic future over the next 15-20yrs, however there was rather less pessimism about the future in 5yrs time.
- Ship Building/Navigation and Tourism were seen to be the most important economies for the region in 2030.
- The respondents were split when asked how the collaboration between the Port Cities of Corsica, Liguria, Sardinia and Tuscany would affect the future of the North Tyrrhenian Sea area. Just over 40% felt that it was something, which needed to happen and be sought, while just over 40% felt that this was indispensable.

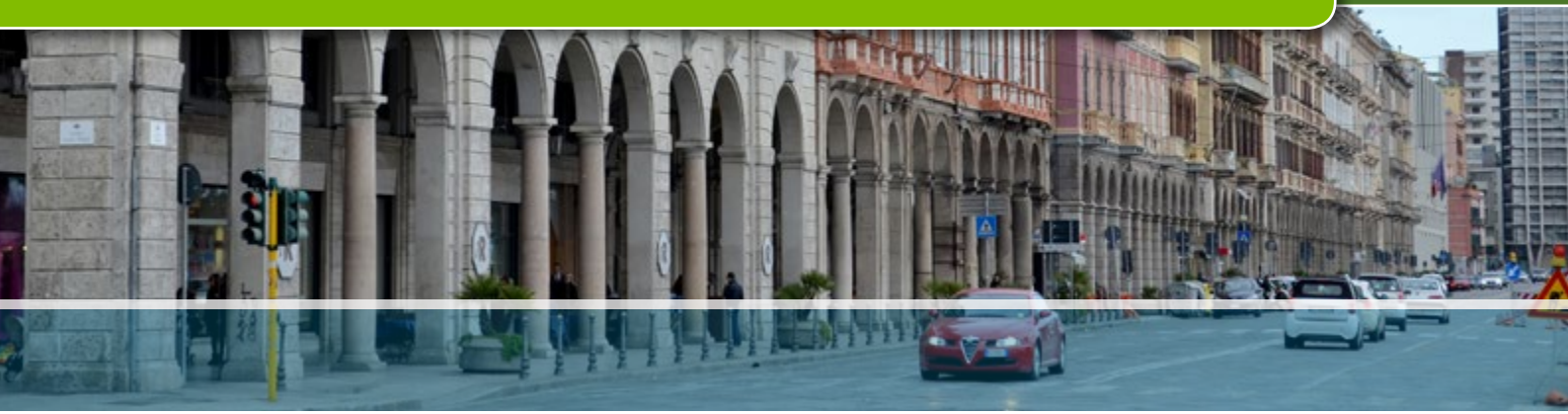


1.3 SCENARIO PLANNING PROCESS

- A critical early step in this process was initiating a wide-ranging discussion about different possibilities for the future of the Sardinia region and the relationship of the port cities within the North Tyrrhenian Sea area. To begin this exploratory conversation about the future, the Region has engaged in an innovative Scenario Planning Process.
- The Scenario Planning process brought together the regional stakeholders in order to explore the future and develop a range of plausible future scenarios, looking out as far as 2030. The four scenarios were built around a critical cluster of drivers, which are the basis for two axes on the scenario matrix that define four scenario “spaces,” with quadrants either towards or away from each driver cluster. These quadrants were used to formulate four plausible scenarios. The axes were **“Instruction effort and training of new generations for policy participation”** and **“Orientation and focus of financial resources”**
- The four plausible scenarios were defined and described in detail. Participants speculated about the characteristics of each scenario and major events that could occur in the region against the triple bottom line dimensions of society, environment and economy.

1.4 DISCUSSION ON THE REGIONAL SCENARIOS

- The participants were asked to review the scenarios, consider their implications, and select a scenario that most reflected their preferred future. The majority of participants (77%) chose Scenario C **‘The Dreams Island’** as their preferred future. This future is characterised by a strong propensity towards high-quality tourism as an attracting element for a high number of international tourists, who ultimately decide to reside in the region. 23% of the participants felt that Scenario B represented the preferred future scenario – **‘Door to the Mediterranean’**. This future is characterised by intense development in infrastructures, in order to improve external and internal connections (mainly within the urban areas).



- The workshop participants were not in complete agreement regarding which of the futures, the region was currently heading towards. The majority (41%) felt that the region was currently heading to a future represented by Scenario C '**The Dreams Island**', which interestingly, was the preferred future. 29% felt that the region was heading towards Scenario B '**Door to the Mediterranean**', which represented 23% of the participants' preferred future. 23% felt that the region was heading towards the bleak future of Scenario D '**Desert surrounding the Nuraghi**' and finally 5% felt that Scenario A '**+Cement, -Brains**' represented the expected future.



2. INTRODUCTION

The Scenario Planning work presented in this report was conducted in order to ascertain the local population of Sardinia's views of the future of their ports and coastal cities, with the cohesion and engagement between the port cities of the North Tyrrhenian Sea area as a main focus. The participants focused on how the decisions made by urban planners would mobilise tourism, cultural heritage, socio-economics and the management of the territories, in the city ports. The nature of the future think tank workshop enabled participants to ascertain the plausible scenarios for their region and port cities, and explore the initiatives and priority actions that were needed to be taken in order to achieve their preferred future.

This cohesion and connectivity between the port cities, would involve sharing knowledge and working together for the benefit of the Sardinia region and the North Tyrrhenian Sea area.



3. BACKGROUND TO THE REGION

Sardinia (the second largest island in the Mediterranean Sea) has coasts extending for 1340 km. They are generally high and rocky, straight for kilometres and often ending with ridges, deep sea inlets surrounded by islands. The Sardinian aspect on the Western Mediterranean basin is very favourable: the island Asinara is situated almost at the same distance (350-360 km) from Genoa, Marseille and Minorca (Baleari Islands); in the Southern part, similar is the distance between Cagliari and Palermo.

3.1 SOCIAL ASPECTS

From a demographic standpoint, the trend of the last twenty years is particularly stable. From 1990 to 2012 the population has augmented by 0.15%, with an average annual rate of growth of 0.01%, and a ratio of male / female constant at 49% for the males and 51% for the females.

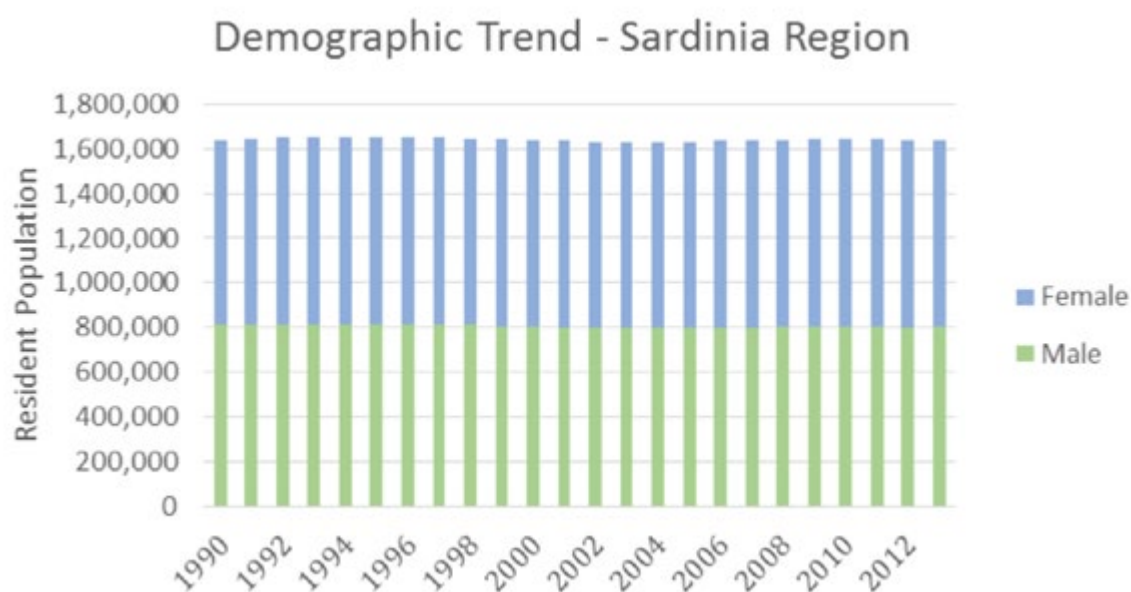


Figure 1: Demographic Trend (Our Elaboration on Eurostat data series)



With regard to per capita wealth, this ranks below the European average of about 21% in 2011 (with a decreasing trend), and it appears to remain constant after a slight increase until 2008.

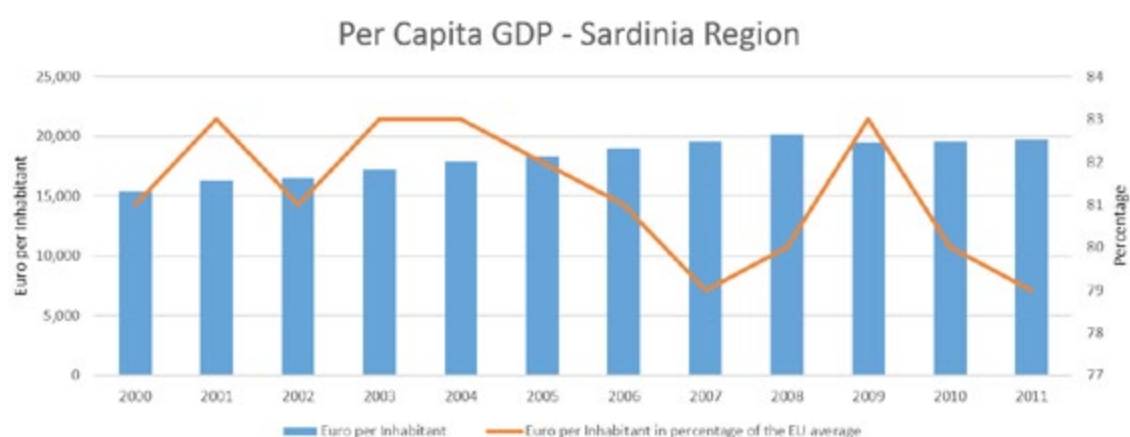


Figure 2: Per-Capita GDP (Our Elaboration on Eurostat data series)

Overall, from 2000 to 2011, the per capita wealth in Sardinia grew by 28%, with an average annual growth rate of 1% (with a slight decrease of 3% in 2010).

However there was an increase in the percentage of the population considered at risk of poverty and social exclusion, particularly between 2009 and 2013, and this is still growing.



Figure 3: People at risk of Poverty and Social Exclusion (Our Elaboration on Eurostat data series)



In 2009 and 2010 there was a noticeable decrease in the percentage, followed however by a meteoric rise. Between 2004 and 2013 the rate increased by 11%, with an average annual growth rate of about 2%, but much variability (+ 9% in 2005; -6% in 2006; - 2% in 2007; 20% in 2008; - 14% in 2009; - 19% in 2010; +35% in 2011; - 7% in 2012, + 5% in 2013).

In recent years unemployment has grown steadily (with a slight decline in 2011). In this case, also male unemployment is of concern in addition to female unemployment, which actually has slightly, but constantly decreased over time. Thus, in 2013 the difference between the two sexes is almost non-existent. From 1999 to 2013, however, there was a decrease of 17%, although between 2006 and 2013 it has increased by 59%. Of these, 55.9% in 2013 were in a situation of long-term unemployment, which is currently in a phase of growth.

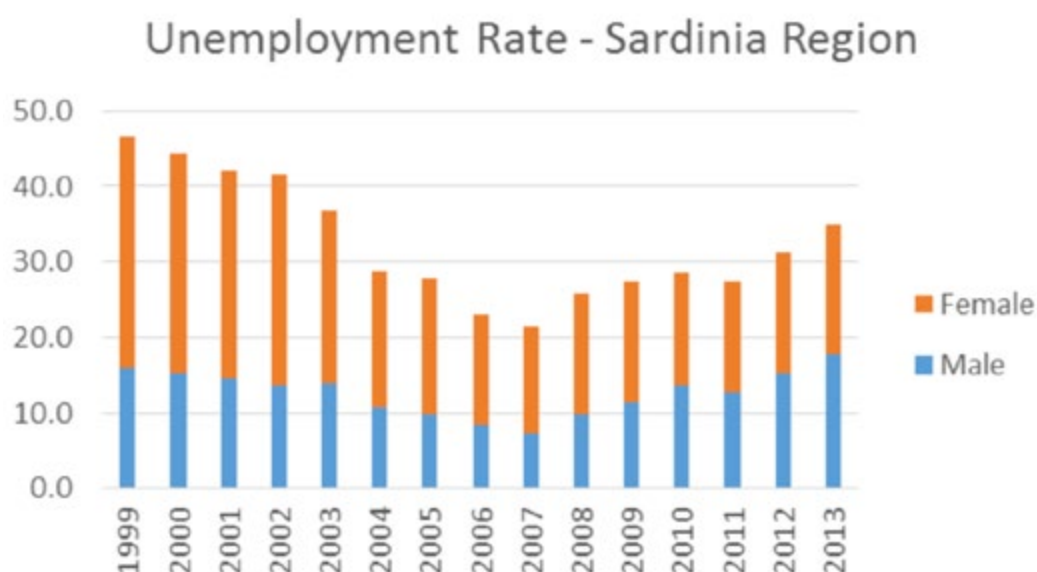


Figure 4: Unemployment Rate (Our elaboration on Eurostat data series)



3.2 ECONOMIC ASPECTS

From an economic point of view, it is interesting to see that Sardinia, from 2004 and 2012 faced a loss in GDP between -6.0 and -7.9. Within the Cooperation Area of the North Tyrrhenian, it is in the average when taking into account the impact of the crisis on all of the other regions: Corsica and Tuscany have been less impacted than Sardinia, while Liguria has been far more impacted by crisis. However, it seems to have a similar resilience in comparison with all the other regions, according to the ESPON data on internal comparative resilience in 2011.

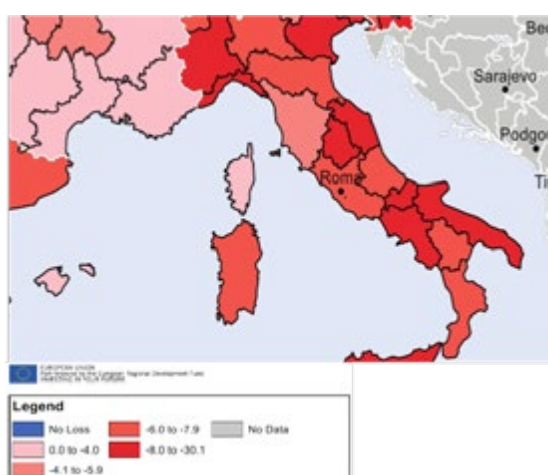


Figure 5: GDP Loss during the Crisis, 2004-2012 (Source: ESPON)



Figure 6: Geographies of Internal Comparative Resilience - Peak Year to 2011 (Source: ESPON)

Concerning the regional economy, its composition is shown in the following graph.

The trend of those who are employed seems constant over time, slightly decreasing in 2013, and it also seems that the population of Sardinia works mainly in the following areas: "Wholesale and retail trade, transport, accommodation and food service activities" (27%), "Public administration, defence, education, human health and social work activities" (26%), "Industry and Construction" (19%).

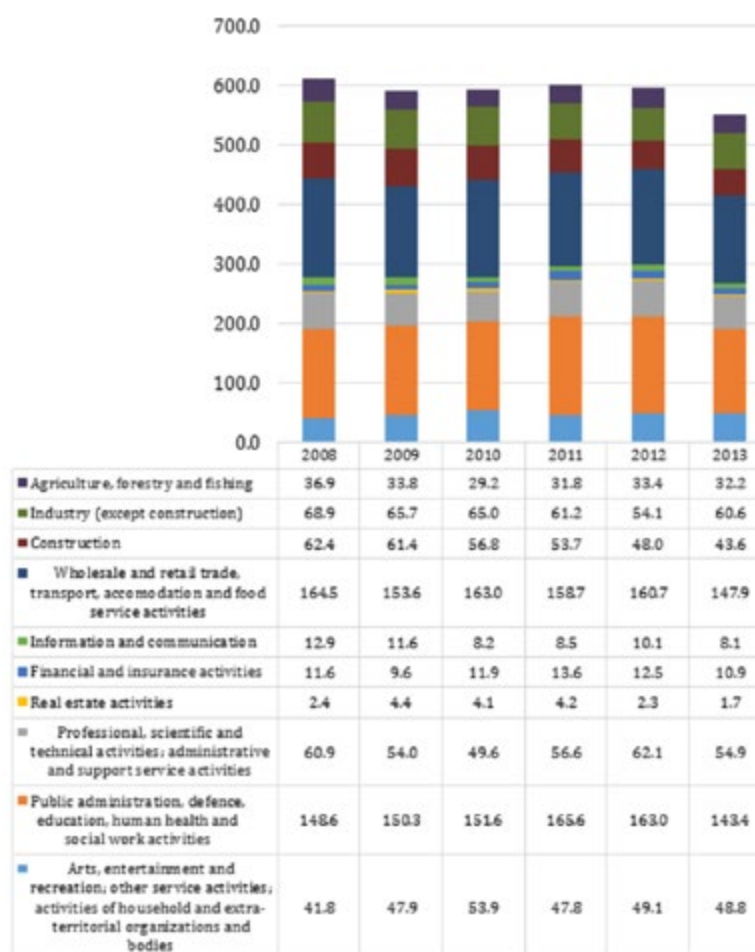


Figure 7: Employment by Economic Activity (Our Elaboration on Eurostat data series)

Of relevance, also, were: “Professional, scientific and technical activities, administrative and support service activities” (10%) and “Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organisations and Bodies” (9%) and “Agriculture, forestry and fishing” (6%). Minor employment seems to be in “Financial and insurance activities” (2%), and “Information and communication” (1%), and “Real Estate activities” (0%).

Regarding more specifically the Maritime Economy, in 2013 this represented in



Figure 8: Blue Economy Composition in 2013 (Source: Unioncamere data)

Sardinia about 5.3% with respect to the total number of companies and 5.5% for the contribution to the added value of the regional economy. The added value created by the economies connected to the Sea in Sardinia (Blue Economy) in 2013 amounted to 1.633 million euro, and had approximately 38 thousand employees. Between 2011 and 2013 the number of companies linked to the Blue Economy have seen an increase of 2.2%, despite the negative growth of -1.2% faced by the general economy. The number of companies registered in 2013 as operating in this segment amounted to 8,968, and the chart below defines the division between the different economic activities. Most of the companies of the Blue Economy in Sardinia operate in the services of Accommodation and Catering (43.6%), followed by those working in Fishery (18.6%), Sports and Recreation (16.2%). Quite important is also the Chain of Shipbuilding (12.5%). The number of enterprises operating in Handling Goods and Passengers by sea represents the 6.7%.

Tourism represents the real vocation of the Sardinian economy, especially the seaside tourism. According to Eurostat data, in 2013 Sardinia had more than 4,200

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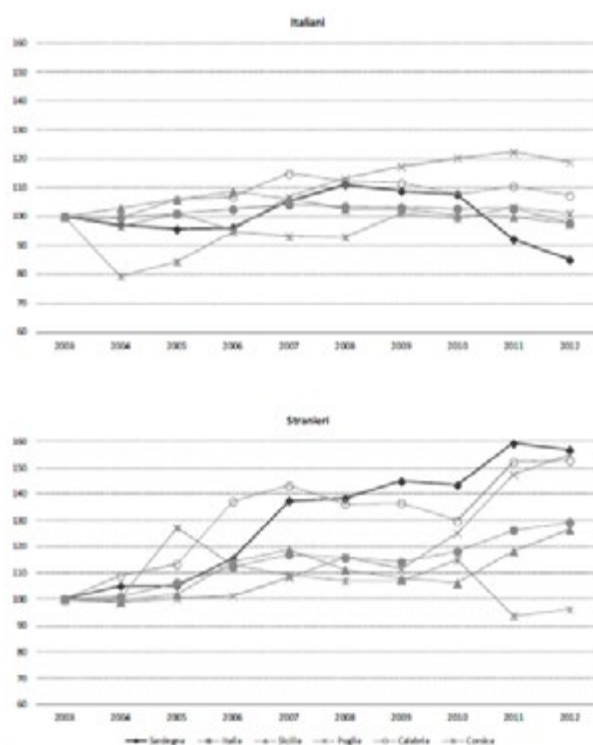


Figure 9: Number of tourists in Sardinian accommodation facilities per nationality, 2003-2012
(Source: CRENoSTerritorio, 2014)

while the attractiveness for foreign visitors is still high and increasing (and far faster than in other Italian regions). This is also an incentive for the export of local products and food excellences.

Nevertheless, the reduction of Italian tourists is a sign of the high variability of the market, and its “being sensitive” to macro-economic junctures and neighbouring international events. It is interesting also to understand the seasonality of tourism. Figure 10 shows the seasonality of passengers’ arrivals in some of the major ports in Italy. It is clear from the graph that there is large variability across the different ports, even belonging to the same region. Indeed, while Cagliari seems to be more balanced among the three periods of the years (summer, intermediate season, and winter), albeit with a higher presence during the intermediate seasons, tourism in Olbia is completely dependent

accommodation establishments, including hotels, holiday and other short-stay accommodations, camping grounds, recreational vehicle parks and trailer parks. In the same year, over 2,170,000 of visitors arrived at tourist accommodation establishments. It is an economic sector which could continue to develop, even if it seems that currently the growth rate for the number of visitors is far lower than one for the number of tourist accommodation establishments. The decreasing growth rate for tourists’ arrivals is also due to the decreasing trend of Italian visitors,

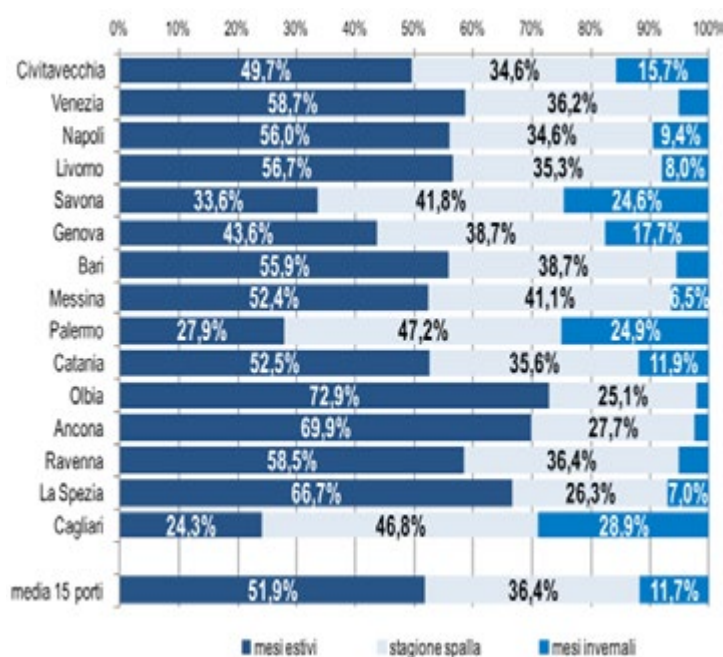
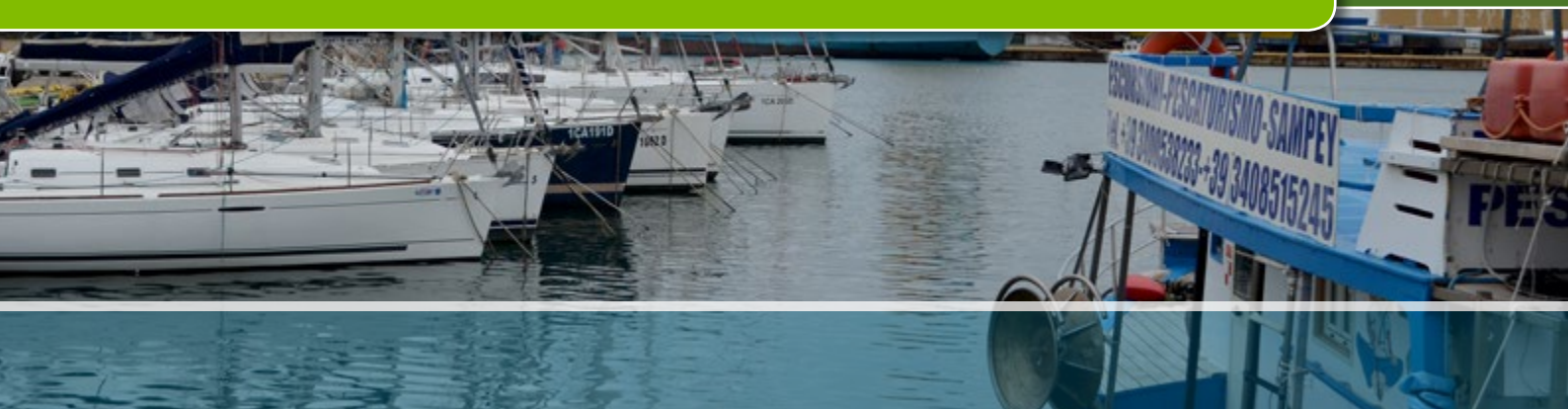


Figure 10: Seasonal Distribution of Passengers in 2013 (Source: Osservatorio Nazionale del Turismo, 2014)

on the summer period (72.9%).

Even leisure boating is very developed in Sardinia, which has approximately 20,000 docks, the majority

of them concentrated in the North part (60%), followed by the South (27%) and the Central coasts (13%). To develop further this economic segment, Sardinia has also introduced the so called Marina Resorts, equipped to host tourists in their own recreational crafts at the ports and smaller touristic ports. Olbia Tempio is the province with the highest number of docks (44% of the region).

However, as far as transport by sea is concerned, it is worth highlighting that the number of passengers handled between 1997 and 2013 has diminished by 18% (and -30% from 2006), and the millions of tons transported have slightly increased, by 3% (with a steady growth since 2000 onwards). The major Sardinian ports for the transit of vessels are La Maddalena, Palau and Carloforte, followed by Olbia, Cagliari, Santa Teresa di Gallura and Porto Torres.

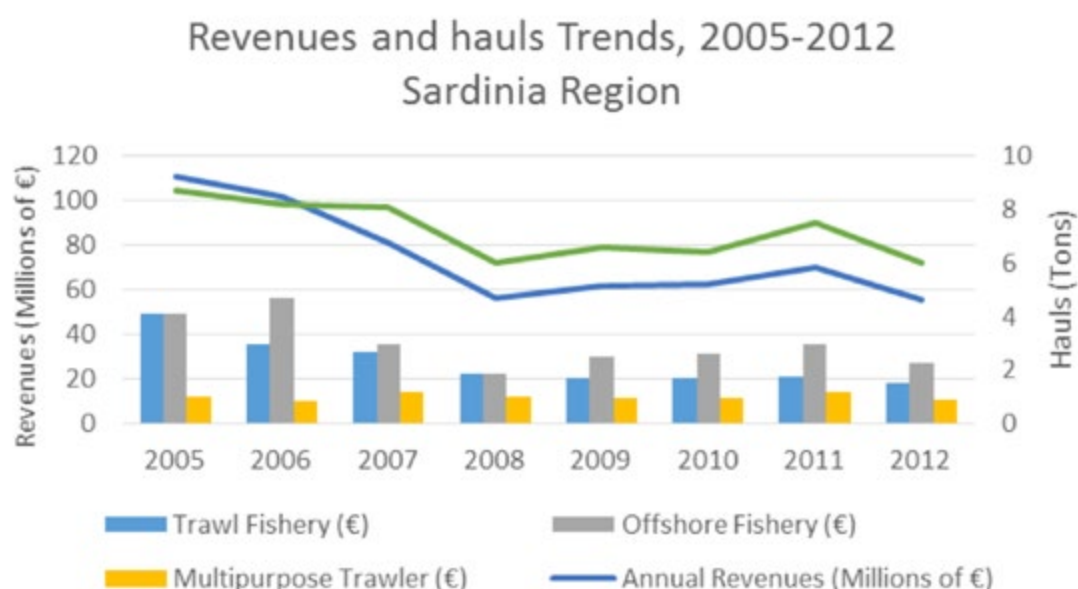


Figure 11: Revenues and Hauls Trends, 2005-2012 (Source: Sistan)

Finally, even though Sardinia has never been particularly devoted to fishing, it has maintained some traditional fishing activities imported in the past centuries by fishermen coming from Campania, Sicily and Liguria, mainly related to the precious resources of the islands, such as tuna and coral, as well as the traditional sea urchin. Fishing in Sardinia is mainly constituted by offshore fishing, which is even more practical than trawler fishing. Instead, aquaculture is very important and historically rooted in the region, particularly performed near to the ponds and basins, mainly related to shell-fish farming (mainly, in Olbia and Oristano), but also fish farming. The ongoing excessive touristic transit and pollution have provoked a drop in the sector. Crayfish production is no longer practiced because it is unprofitable.

It is interesting to note the surrounding administrative and normative background, which impacts inevitably on economic activities and even on the social aspects of the region. Indeed, it has been found that at the local level, there exists some coordination problems between traditional administrative authorities of the “Town” (Ex.:



the Municipality) and the Port's Authorities, all of them owning a ruling power on issues under their jurisdiction. Sometimes competencies among these administrative entities intersect, due to the natural connections that can arise during the realisation of certain infrastructures or other initiatives. The consequent result is an arduous administrative divide between the “Town” and the “Port” because of the lack of functional integration among administrative functions, as well as a cultural divide, due to a lack of “identity” integration.

Even the connections among cities, regions and countries are fundamental for economic development, as well as cultural interchange. It is noticeable that Sardinia, as well as Corsica, suffers from a lack of connection to the continent. However, Sardinia seems to be better connected to the other regions of the North Tyrrhenian than Corsica, as far as ferries and airports are concerned. Nevertheless, Sardinia has some problems with the availability of broadband connections, particularly in specific areas.

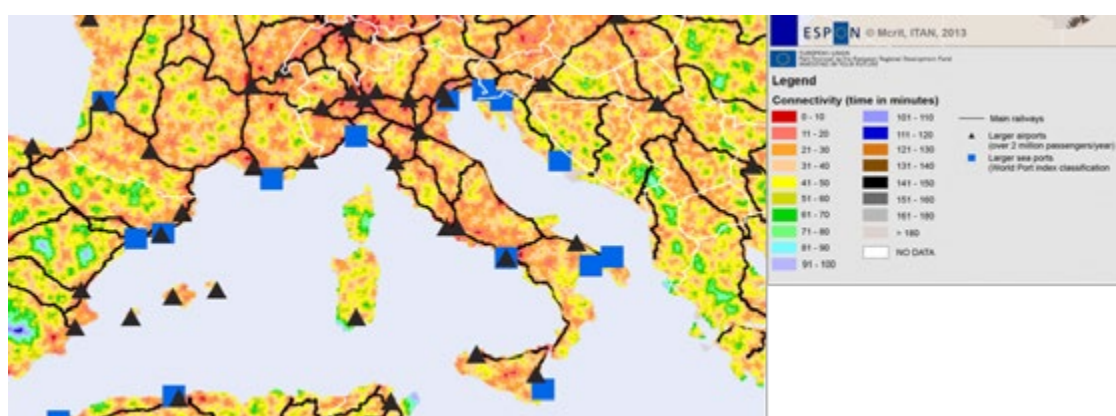


Figure 12: Territorial Connectivity to Road, Rail and Airports 2010 (Source: ESPON)

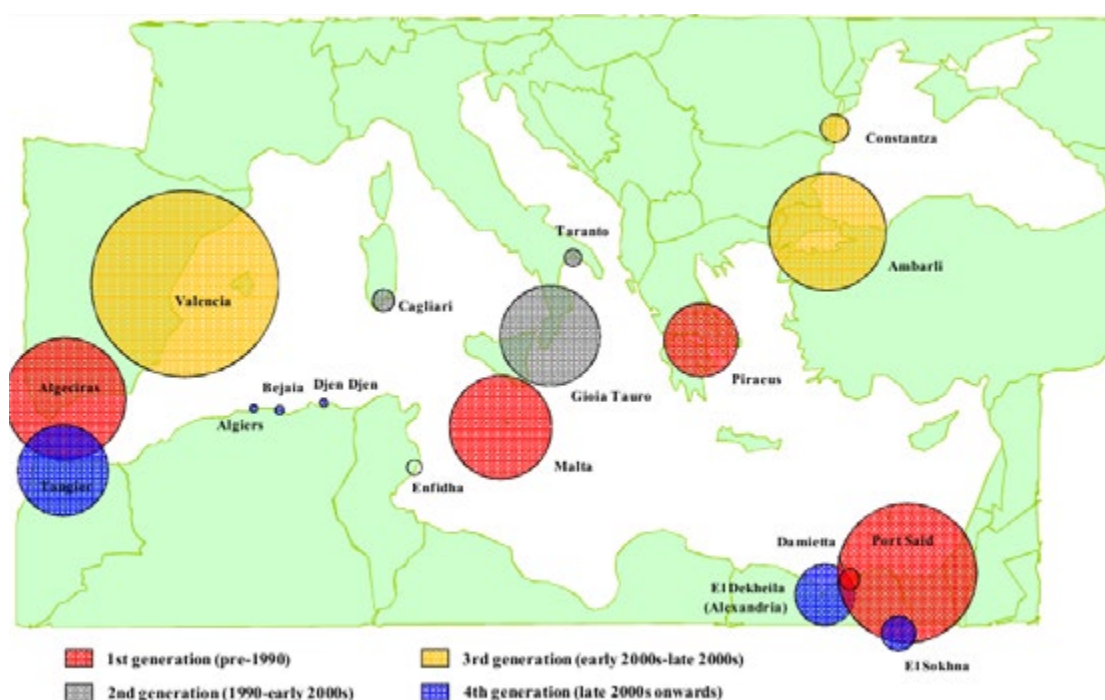


Figure 13: The generation of hubs in the Mediterranean basin (Source: Parola 2013)

In addition, it seems that Corsica ports are not included in the most important hub in the Mediterranean basin: only Cagliari – within the North-Tyrrhenian Area and not only the Sardinian ones – is included as a second-generation port (1990 – early 2000s technology). However, no ports in the North-Tyrrhenian Area have an adequate degree of advanced technology, necessary to be competitive with all of the other Mediterranean ports.

3.3 ENVIRONMENTAL ASPECTS

From an environmental point of view Sardinia has a moderate vulnerability to Natural Hazards, across the region, apart from the province of Medio Campidano, in the South-West Part.

The area is also covered by a low percentage of impervious material, as far as soil sealing is concerned, although there is no dataset available.

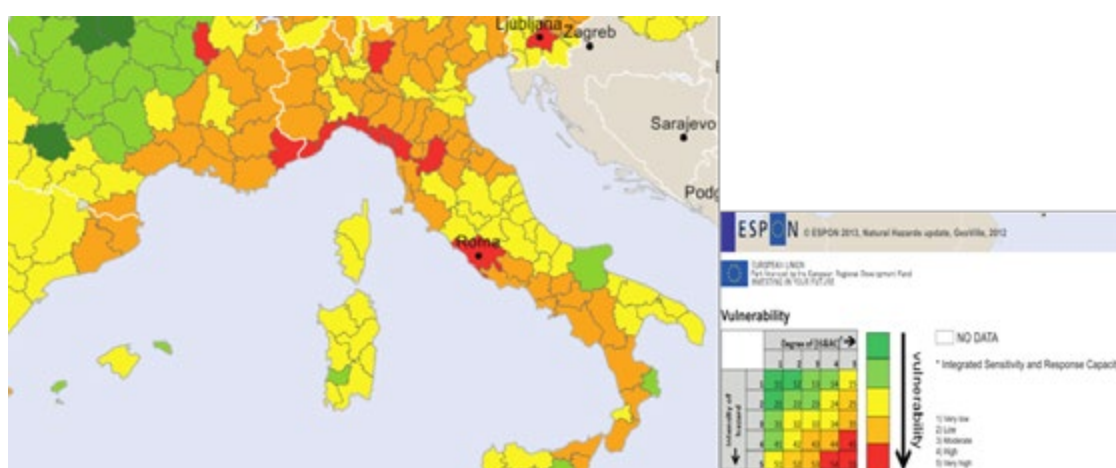


Figure 14: Vulnerability to Natural Hazards (Source: ESPON)

The area is also subjected to a moderate concentration of hazardous substances such as cadmium, mercury and hexachlorobenzene, and a high concentration of lead (mainly in the South part), DDT and PCB.

From a hydrogeological standpoint, from the data available on the Sardinia Geoportal (<http://www.sardegnageoportale.it/>), it is obvious that the highest risk is particularly faced by the East coast, which is also the most urbanised coast.



Figure 15: Hydrogeological Risk in Sardinia (Source: Sardegna Geoportale - Sardegna PAI Maps)

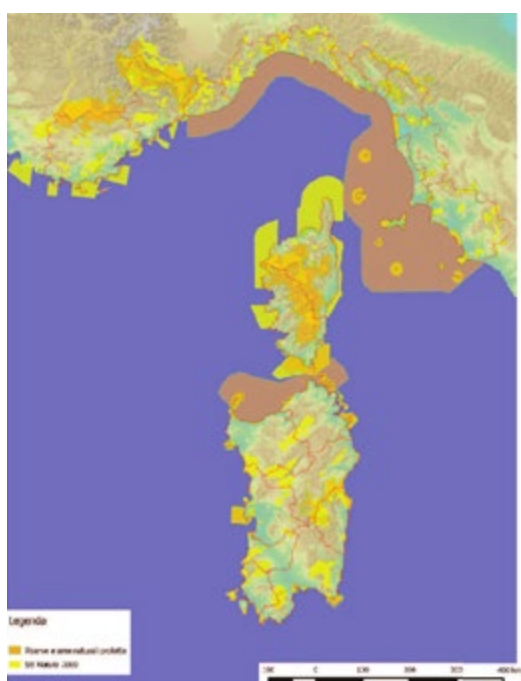


Figure 16: National Protected Areas and Natura 2000 (Source: MaritimeAtlas, 2012)

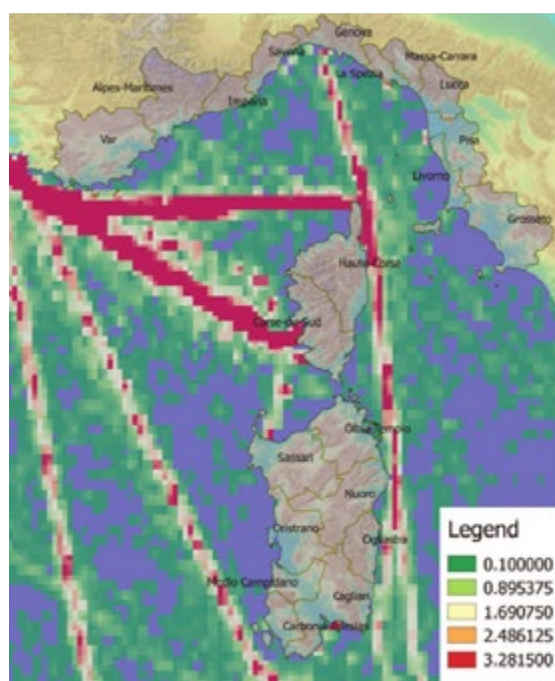


Figure 17: CO₂ Emissions from International Shipping [kt/grid (5km x 5km)] (Source: ESPON)

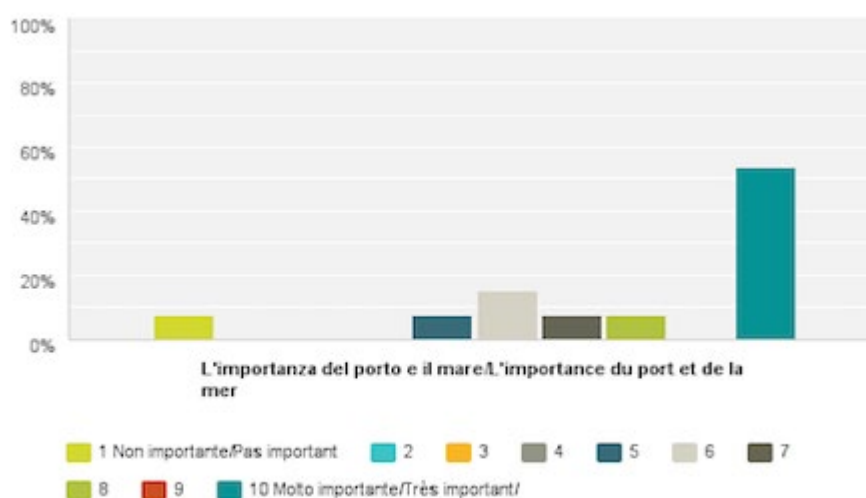
It is also important to stress that Sardinia is part of a maritime area, the North Tyrrhenian, which hosts a great number of national protected areas, therefore, Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), including the well-known Sanctuary for Mediterranean Marine Mammals. Nevertheless the same geographical zone is subjected to a high degree of carbon dioxide emissions produced by international shipping.



4. REGIONAL SURVEYS

Before the start of the Scenario Planning Workshop, an online survey was submitted to its possible participants, to probe their perception about the issues to be discussed during the face-to-face meeting, without pretending any statistical representativeness. The Survey has been submitted by each Region involved in the project. The results of the surveys are presented below.

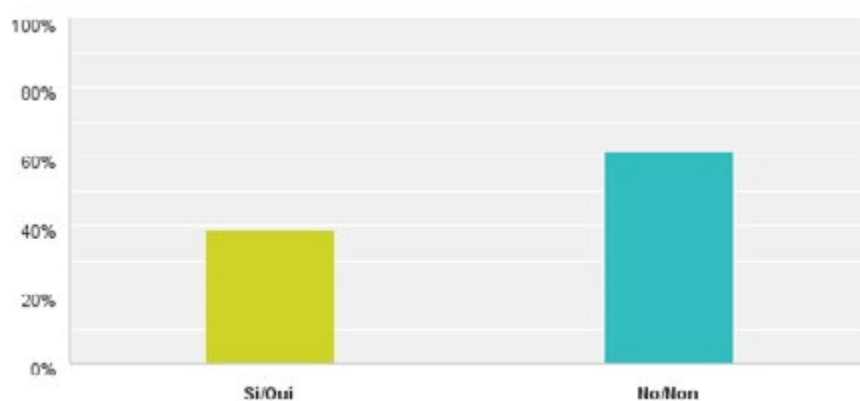
Q3 How important is the port and the sea to your city?



When asked how important the port and the sea were to their city, just over 50% of the respondents felt that it was highly important. The remainder of the participants felt that it not important, ranging up to somewhat important.

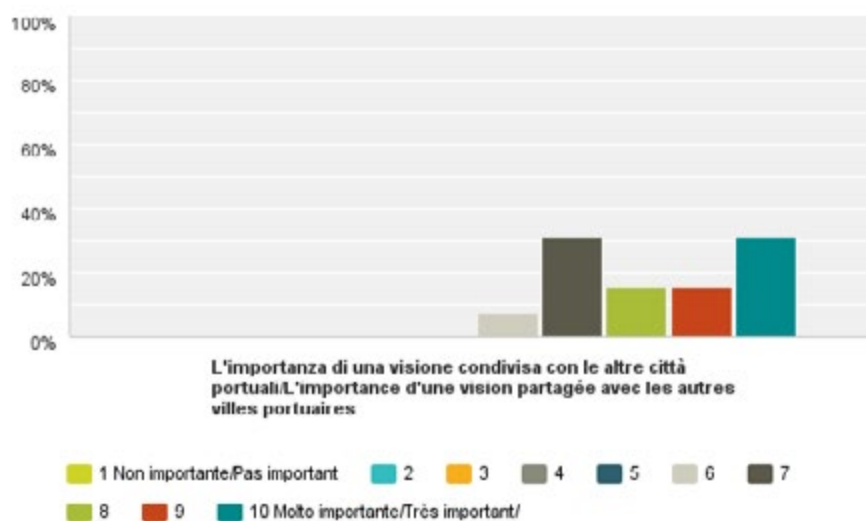


Q4 Have you ever been involved in a planning long term for your city and your territory?



Just over 60% of the participants had not been involved in long term planning processes for their region or city. However approximately 40% of participants had been involved in such processes.

Q5 How important is it to have a shared vision with the other port cities in the North Tyrrhenian Sea area?

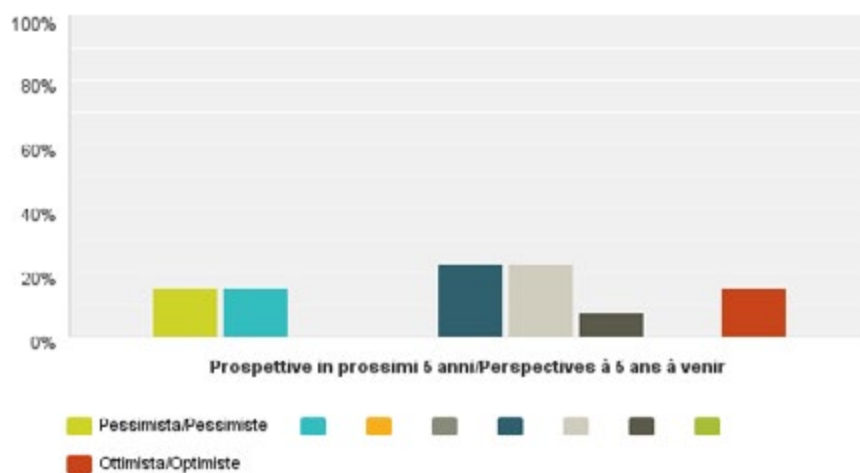


It was felt by approximately 30% of participants that it was highly important to have a shared vision with the other port cities in the Northern Tyrrhenian Sea region.

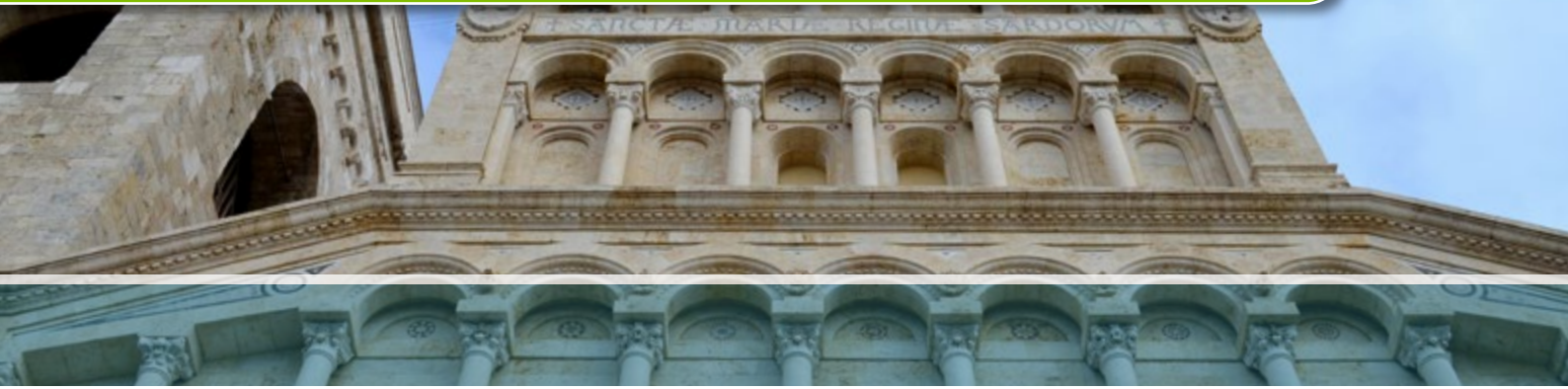


However, the remainder of the respondents felt that it was from just below 'medium importance' through to just below 'very important' for the region to have a shared vision with the other port cities.

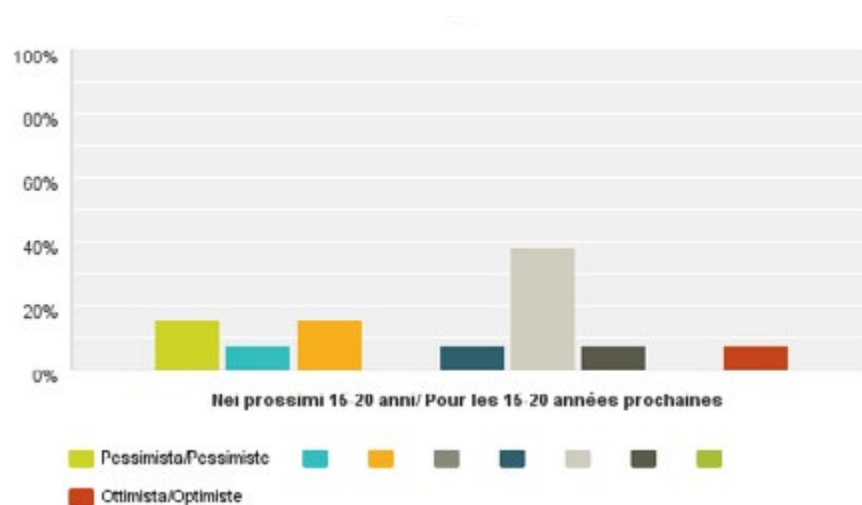
Q7 How do you feel the economic opportunities, and social and environmental aspects of your city and of your area will compare in the next 5 years?



When asked how they felt about the economic, social and environmental opportunities in the region in the next five years, the respondents displayed mixed expectations from pessimism (15%), and just above pessimism through to neutral and just above neutral. Just over 10% were optimistic about the opportunities in the next five years.

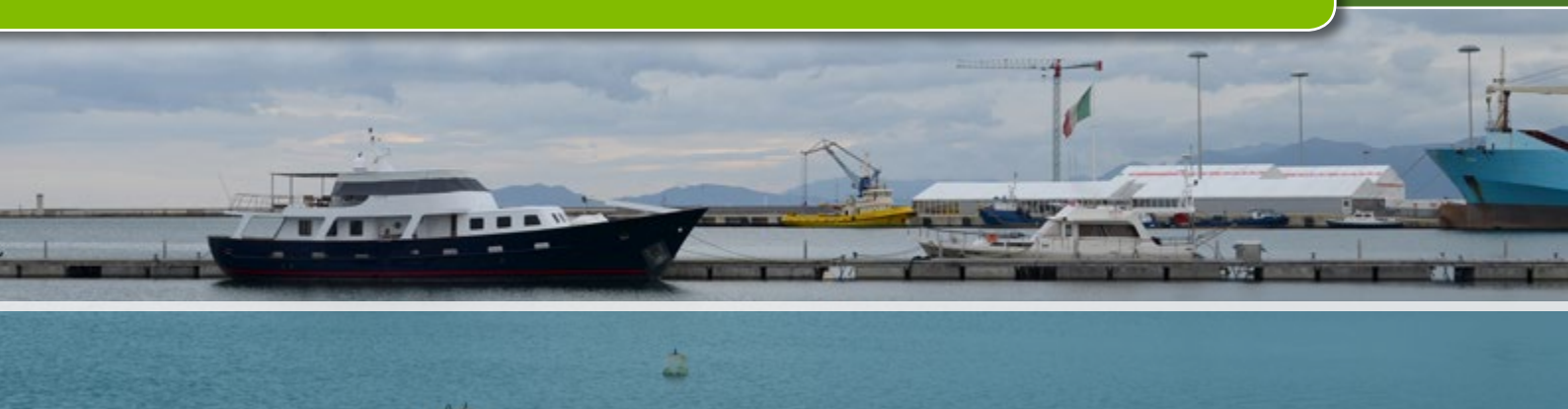


Q8 How do you feel the economic opportunities, social and environmental aspects of your city and of your area will be in the next 15-20 years?

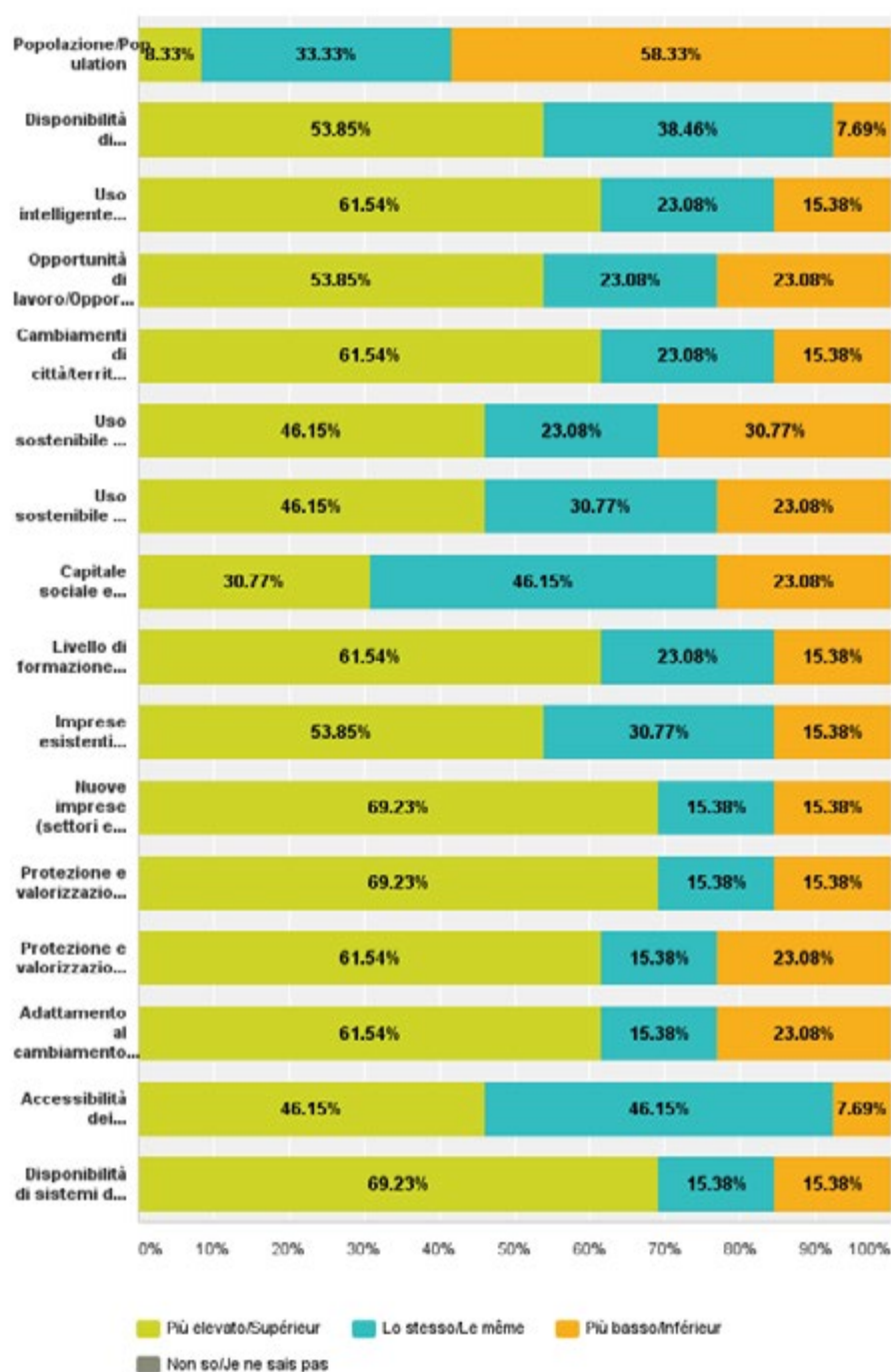


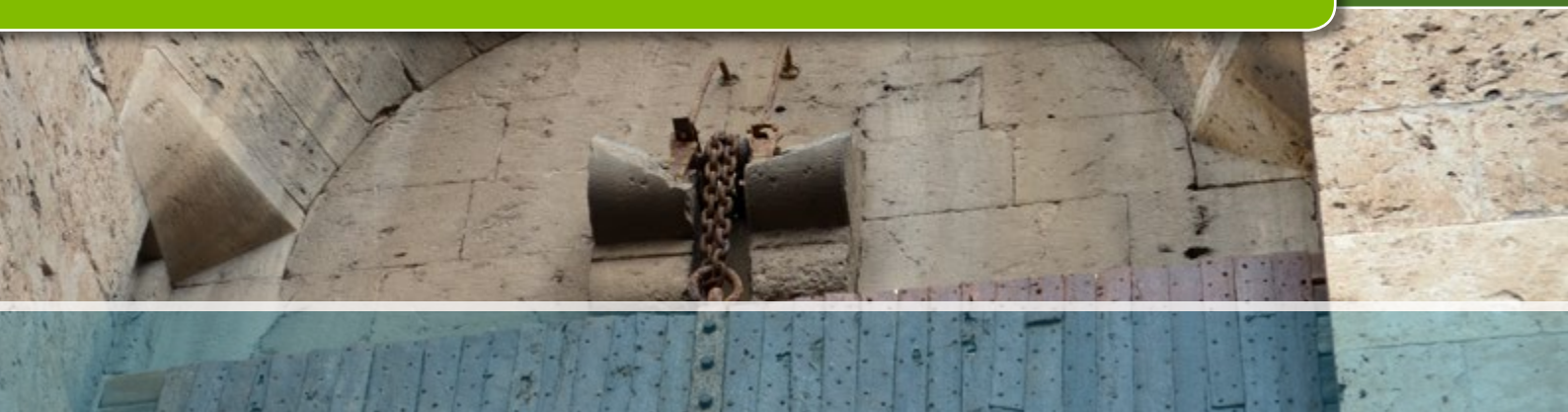
When asked how they felt the prospects would be over the next 15-20 years, again the responses were mixed with 15% pessimistic, and just over 5% optimistic. The majority were just above neutral, towards optimistic. This displays a very similar response to Q7.

When asked about how the region would fare in 2030, the respondents felt that population would decline dramatically, yet saw the other aspects as improving/increasing.



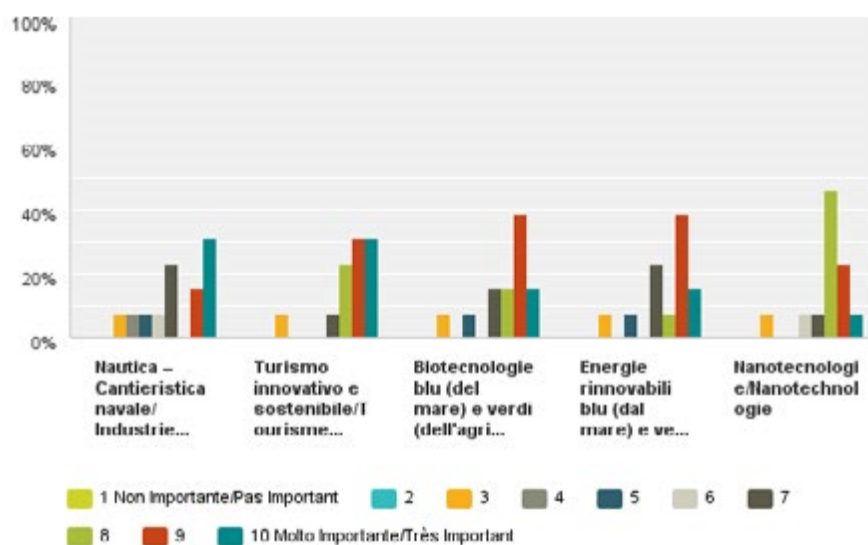
Q9 Which do you expect to be the following characters of your territory in 2030 compared to today? Select from the options below.





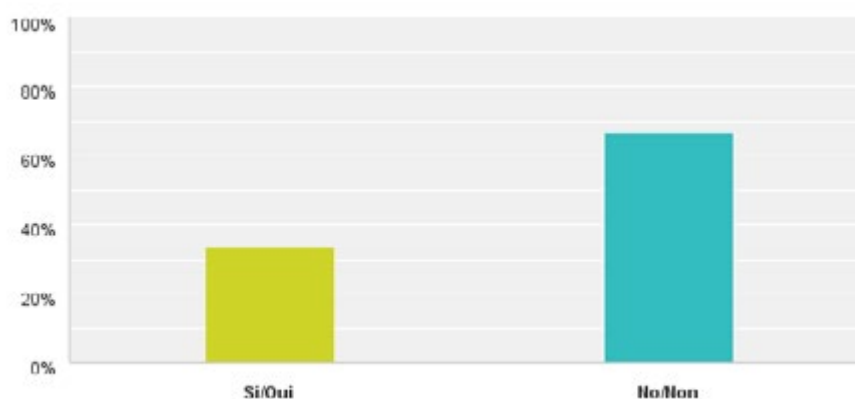
Q10 How important do you think the following economic sectors will be in 2030?

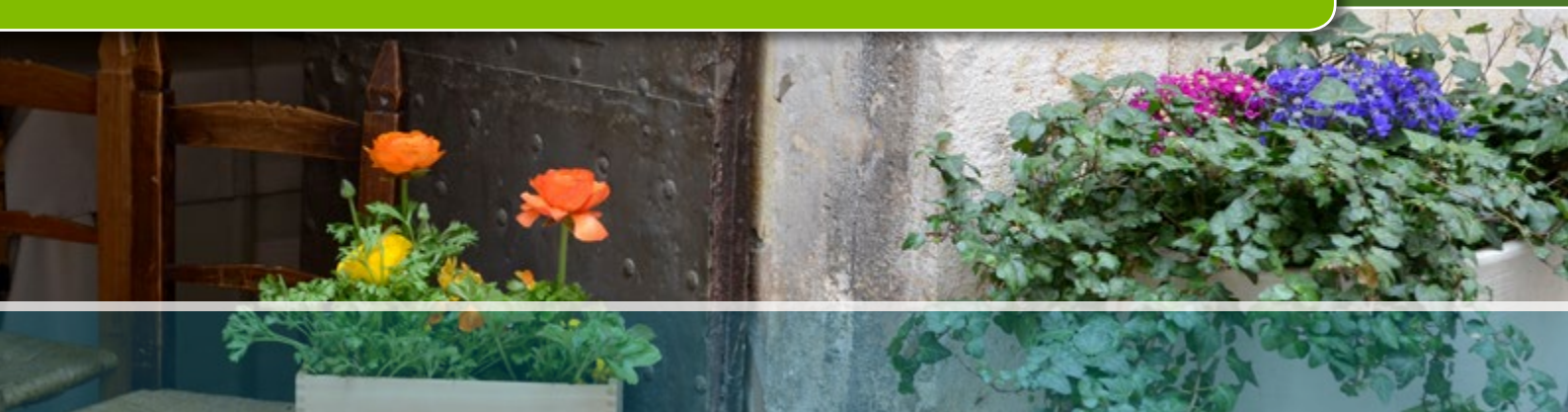
(1 = not important; 10 = very important)



When asked which economies would be the most relevant in 2030, the respondents felt that Shipbuilding /Navigation and Tourism would be the most important economies. However, there were expectations that the following industries would be almost as important economies, however these were seen as less important than shipbuilding/ navigation and tourism: Blue (sea) Technologies combined with Agriculture, Blue (sea) and green (Biomass) renewable energies and Nano Technologies.

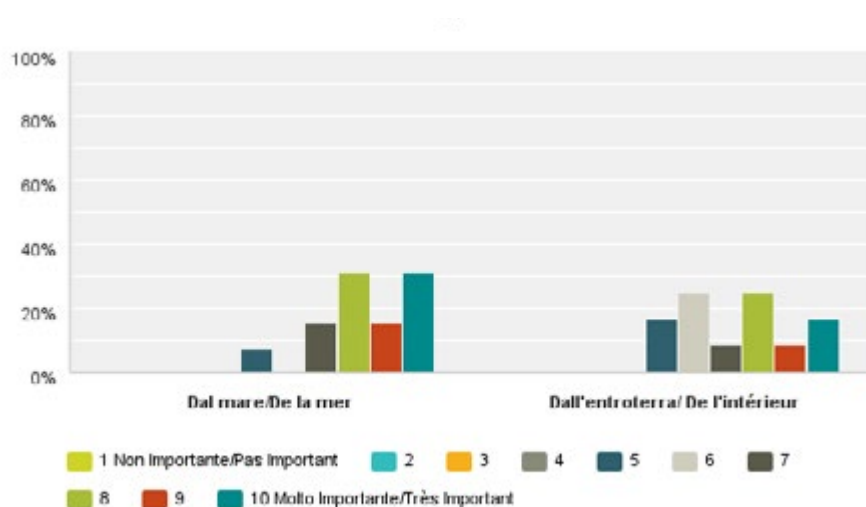
Q11 During the past three years have you had professional relationships in the cities of the Upper Tyrrhenian regions other than your own?





The majority of respondents had not had any work related activities with any of the other port cities other than Sardinia (60-70%). However, it is interesting to note that approximately 30% had some work experience related to the other port cities. Therefore, most of the respondents did not have a professional connection with the other port cities, which would influence their opinions on the cohesiveness of the port cities across the North Tyrrhenian Sea.

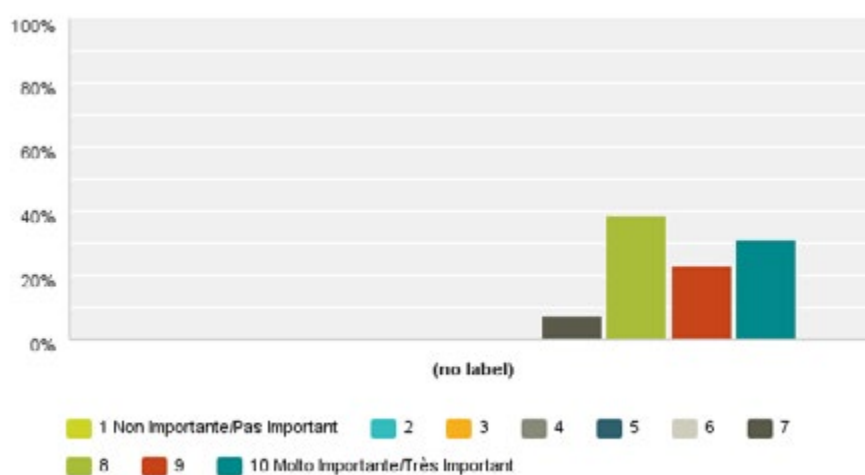
Q15 Do you think the future of your city and your dependent territory depends on the sea or the interior? (1 = not important; 10 = very important)



When asked whether the future of the region depends on the sea or the inland, the majority chose the sea as being highly important, with the remainder of the respondents seeing the importance of the sea as being just less than highly important down to somewhat important. There was a real spread regarding the respondents' view of the relevance of the inland, however these responses all came above the neutral point.

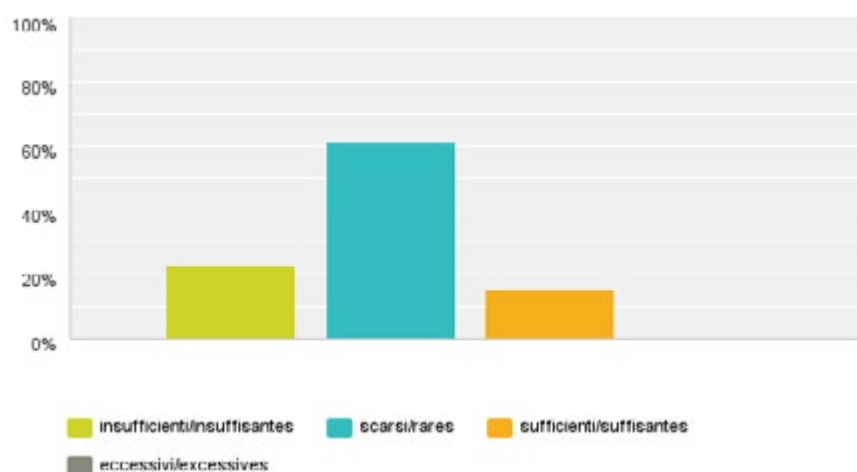


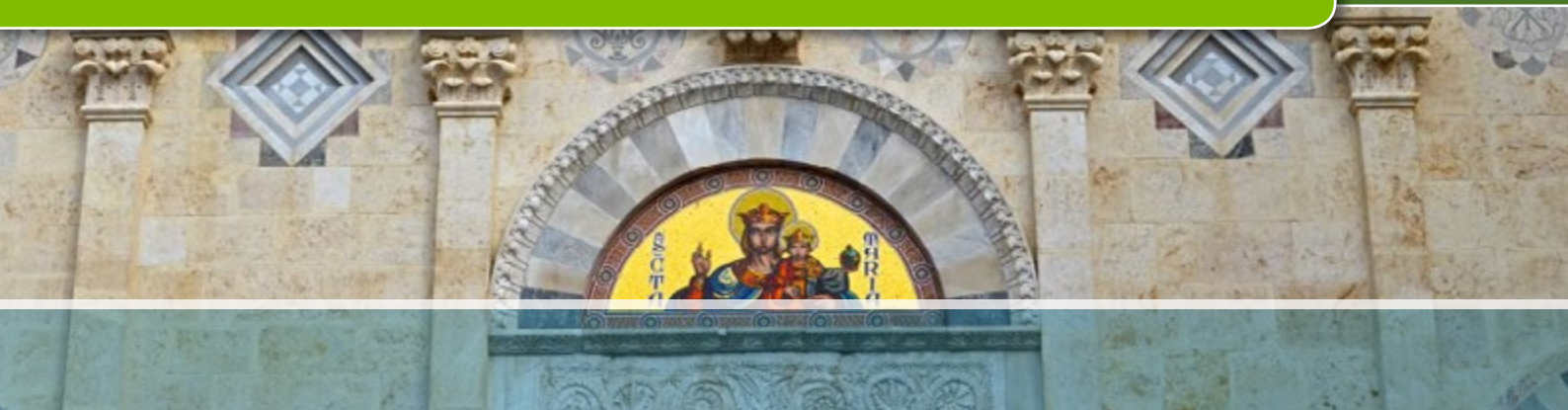
Q16 How important is the solidarity and social cohesion to the future of your city and of your territory?



When asked how solidarity and social cohesion was important to the future of their region or port city, interesting this was a rather mixed spread. While some felt it was highly important (approximately 30%), it was not an overwhelming figure. However all respondents felt it was between highly important and just above neutral. This would be something to explore further, as social cohesion and solidarity are extremely relevant internally as well as for the future cohesiveness with the other port cities.

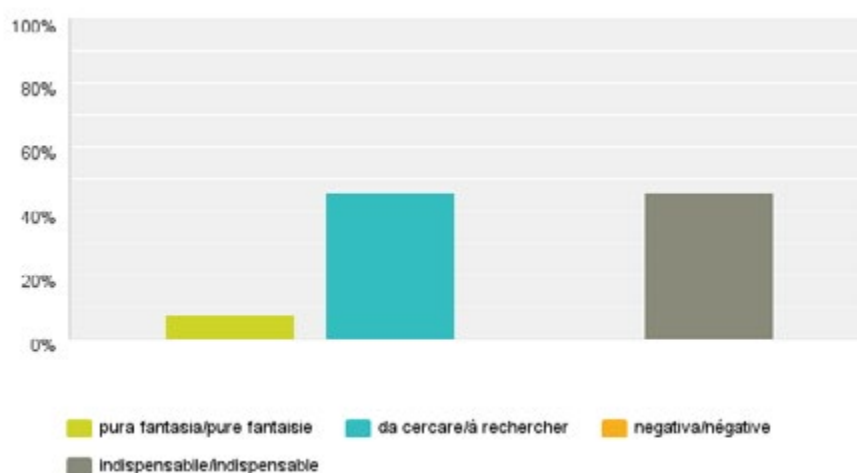
Q17 Do you think that the connections of your city, compared to the needs, of your city are insufficient, scarce, sufficient or excessive?





The respondents, when asked how the connections of their regional cities compared to the needs of these cities, generally felt that the connections were ranging from insufficient to sufficient. Approximately 60% felt that the connections compared to the needs of the cities was poor.

Q18 Do you think the collaboration between Corsica, Liguria, Tuscany and Sardinia with regards to the future of the Northern Tyrrhenian Region is: fantasy, needed to be sought, negative or indispensable?



The respondents were split when asked how the collaboration between the Port Cities of Corsica, Liguria, Sardinia and Tuscany would affect the future of the North Tyrrhenian Sea area. Just over 40% felt that it was something, which needed to happen and be sought, while just over 40% felt that this collaboration was indispensable. Interestingly less than 10% felt that such collaboration was a fantasy. However, this does point to the agreement that the collaboration is possible and achievable.



5. SETTING THE STAGE – SCENARIO PLANNING

Decision makers in the Sardinia region decided to embark on a Scenario Planning process for the purposes of this project, with the collaboration of the Port Cities in the North Tyrrhenian Sea as a focus.

This Scenario Planning process would:

- Deepen an understanding of how external events and regional conditions shape decision-making;
- Identify and understand the key influences, trends, and dynamics that will shape the region over the next 20 years;
- Create and describe four plausible long-term scenarios for the region;
- Begin exploring alignment around a shared regional vision.

The scenarios developed during this Scenario Planning Process and outlined in this report are important to provide a "vehicle" to be used in the process of building a shared vision for the future of the region. In addition, the workshop deliberations can assist in identifying key actions for the region and assist in identifying how various groups might best contribute to future developments.

The Scenario Planning process as applied in the region, offered an excellent opportunity for the regional community to examine the future in a thoughtful and structured manner.

The design of the workshop included:

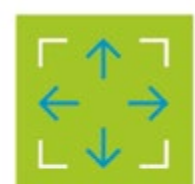
- The Attributes exercise, exploring successful community characteristics.
- Presentation and discussion about key forces shaping the future, at a global and regional level.



These exercises and work were aimed to build a robust basis for the scenario formulation.

5.1 SCENARIO PLANNING PROCESS

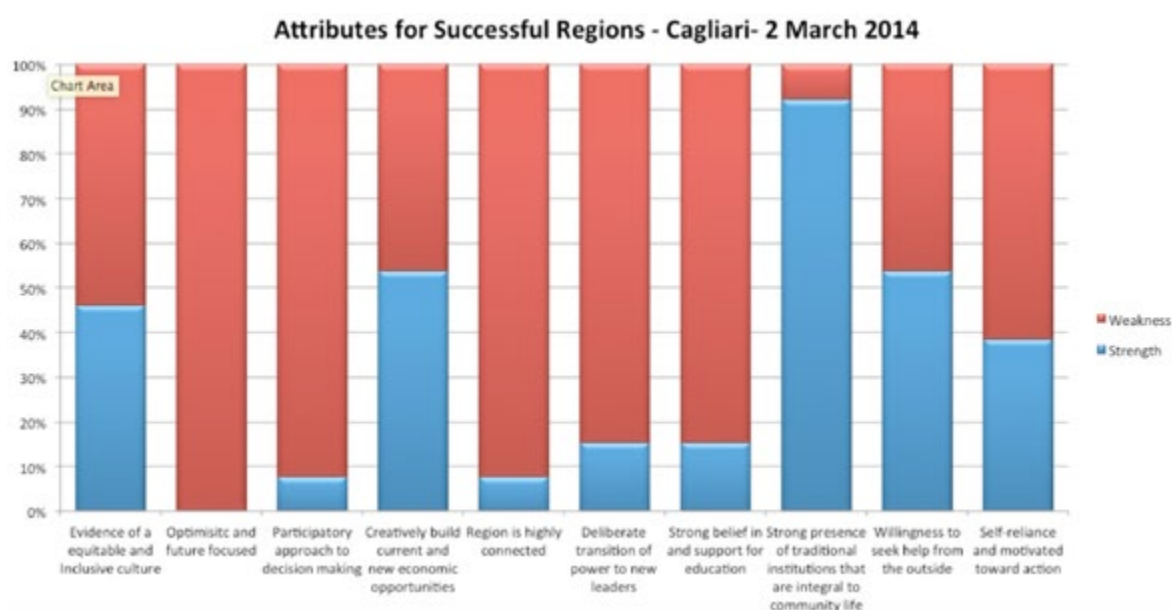
This report presents the background, results, and recommendations from the Future Think Tank workshop in Cagliari, Sardinia. This process aimed to explore the future directions and opportunities for the region, and commence work on creating a regional vision for economic development, and in relation to the collaboration of the Port Cities in the North Tyrrhenian Sea area. People from across the region attended the workshop held on March 2nd and 3rd, 2015. At this workshop, participants discussed the region's future and developed plausible scenarios for the region in 2030.



DecisionPath

SCENARIO PLANNING

During the workshop, participants individually evaluated the current status of the community based on the Ten Attributes of Successful Communities. This exercise was adapted from 'The Heartland Centre for Leadership Development'.





It was interesting to note that the participants felt that the region was strong in the following area:

- Strong presence of traditional institutions that are integral to community life

However, the participants felt that the region was weak in the following areas:

- Optimistic and future focused
- Participatory approach to decision making
- The region is highly connected
- Deliberate transition of power to new leaders
- Strong belief and support for education

The participants were then guided through a Scenario Planning process to develop four plausible scenarios for the future of the Region. This process has been applied by Future iQ Partners in regional Scenario Planning events in numerous settings across North America, Australia and Europe.

The process, which is described in detail below, involves an exploration and discussion of global, regional, and local trends and forces of change; identification and ranking of drivers and influences that will likely shape the future of the region; development of a scenario matrix defining four plausible scenarios spaces for the future; and the development of descriptive narratives of each scenario. The event concluded with discussion of the scenarios and their desirability in contributing to a regional vision of the future. An important part of the Scenario Planning process is that it aims not merely to develop plausible scenarios for the future, but to identify how they may be turned into tangible actions in the region and compiled in a regional economic planning strategy.



5.2 WHY SCENARIO PLANNING?

Scenario Planning is a method that is used to develop plausible scenarios for the future. Scenarios are not predictions, but are a way of exploring plausible futures. The method differs from traditional strategic planning as it allows the exploration of many factors, or drivers of the future, concurrently. It does so by using local knowledge and expectations about the drivers to produce a framework that defines and explores a range of plausible futures. In this manner the approach enables people to explore the impacts and consequences of a range of different future pathways.

Generally, Scenario Planning processes are run over several days, weeks, or even months. A condensed form of Scenario Planning, developed by Future iQ Partners, was used in this project so that the scenario session was completed in a two days. This design is intended to allow otherwise busy and committed people to contribute and participate in a future planning process in an effective and efficient manner. This design relies on sufficient background information being presented to enable realistic and informed evaluation by the participants. It also requires participants who are broad-minded and freethinking, and who collectively and individually can bring their experience to the identification of the key drivers and to the development of the scenarios.

5.3 DEVELOPING FOUR PLAUSIBLE SCENARIOS FOR THE FUTURE

The regional stakeholders explored the future and developed plausible future scenarios, looking out as far as 2030. To set the context for their thinking, the planning session included discussion of global, national, and regional forces that could impact the region. The project facilitator presented an overview of global, regional and local trends. Participants reviewed and discussed these trends, considering how they could impact on the future direction of the region.

5.4 CREATING SCENARIO SPACES – FOUR PLAUSIBLE SCENARIOS FOR THE FUTURE

Through discussion, two themes were developed which would become the basis for two axes on the scenario matrix that define four scenario ‘spaces’, with quadrants either towards or away for each driver cluster. These quadrants were used to formulate four plausible scenarios.

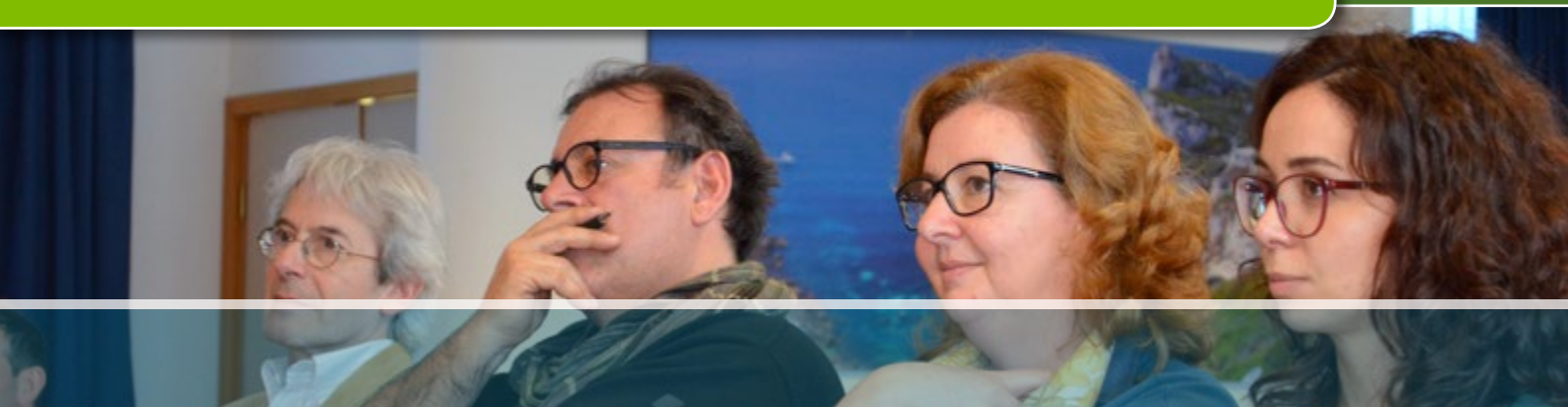
The axis were **‘Instruction effort and training of new generations for policy participation’** and **‘Orientation and focus of financial resources’**.

The four quadrants (scenario spaces), based on increase and decrease directions of the two cluster themes, were reviewed and discussed with the participants. This discussion explored the drivers included in each scenario-shaping cluster, the scope of each cluster, and how they formed the axes that defined the four scenario spaces. The participants were asked to consider the main attributes of each of the quadrants and to begin to speculate about how the region would look in a future based on each of the quadrants.

5.5 CREATING NARRATIVES FOR EACH SCENARIO QUADRANT

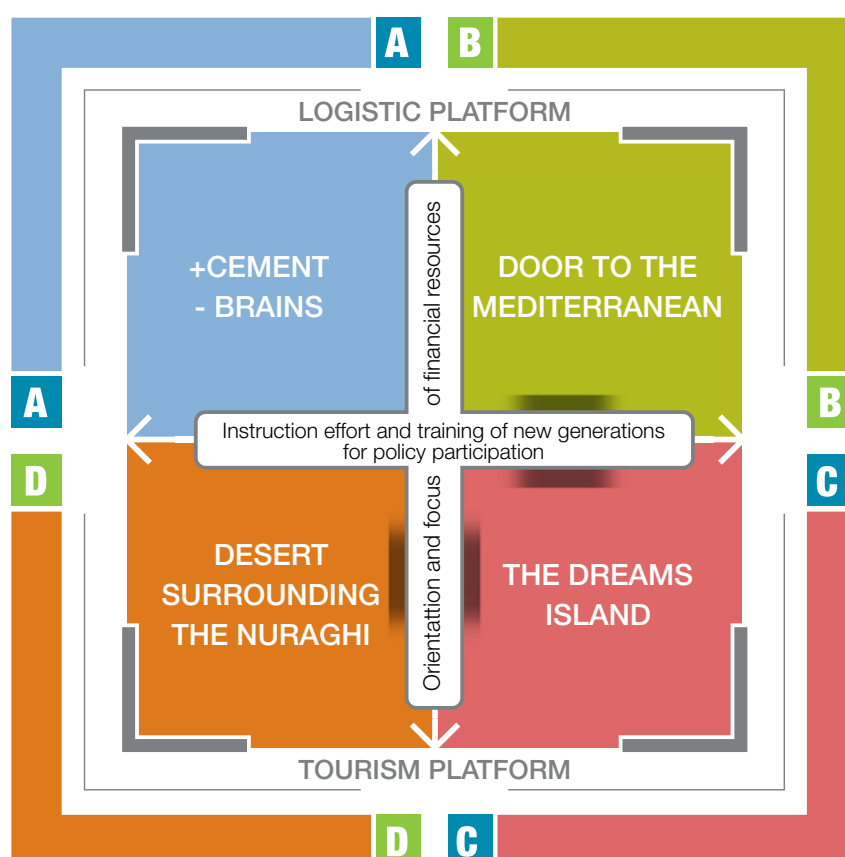
Event participants were randomly allocated to one of four groups and asked to formulate a scenario for their respective quadrant. Each group was facilitated by local facilitators to describe the region in 2030 under the conditions of the scenario quadrant that they had been given in terms of the triple-bottom line of social, economic, and environmental characteristics.

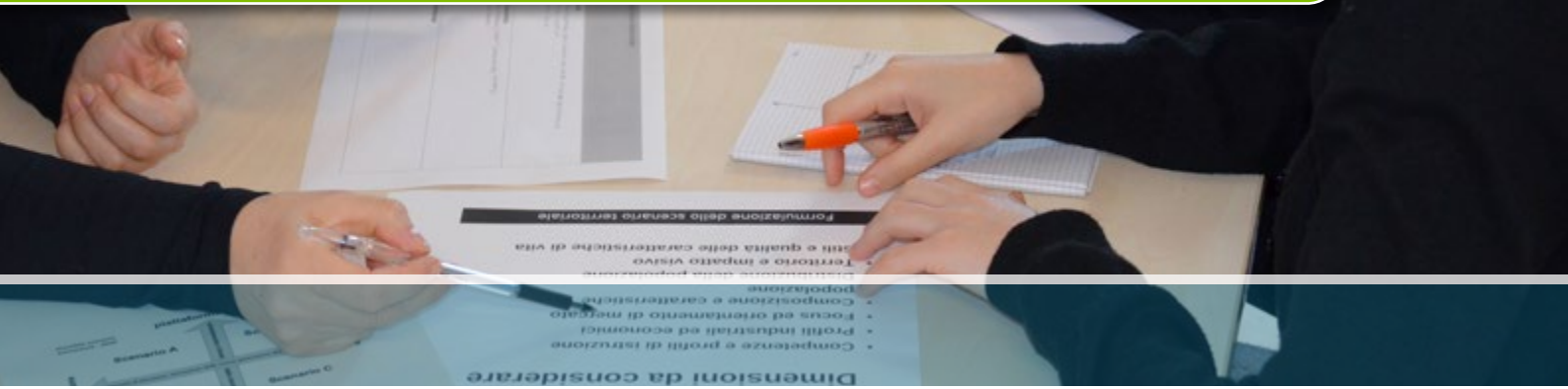
In addition, they were asked to devise major events or headlines of how the scenario occurred using the years 2015, 2020, and 2030 and to give their scenario a descriptive name. Once the scenarios had been developed, each group reported back, describing their scenario to the symposium participants.



This allowed for clarification, questions, and an assessment of the plausibility of each scenario. Each group's notes for their scenario and the description of it when it was presented to the other participants were used to produce the detailed narrative for each scenario that is presented in the next section of this report.

The scenario quadrants defined by the cluster themes show the names of each scenario as created by the participants.





These four scenarios paint very different plausible futures for the region.

The workshop participants considered them all as plausible futures, as in, they could actually happen. Narratives and descriptions of each scenario, as developed by the workshop participants, are included in the following section.

Each scenario has its subsequent consequences and impacts on the regions fabric of the region – impacting the economic, society and environment in different ways. No one future is the 'perfect' future, as each comes with its attendant challenges and implications. The process, however, does provide a way to tease out the future scenarios and examine them from a speculative standpoint. They represent different possibilities for the future, and are not predictions.



6. DETAILED DESCRIPTIONS OF THE SCENARIOS

6.1 SCENARIO A – +CEMENT, -BRAINS – 2030

This future is characterised by a focus on material assets rather than immaterial ones (knowledge, know-how and people's shared construction capacity). On the one hand, there is an actual increase in competitiveness for the logistic system, even at an international scale, thereby increasing the attractiveness of foreign capitals to be invested in the territory. Labour-intensive firms are established, encouraged by favourable tax treatments. On the other hand, this specialisation and excessive focus on material assets creates a stagnation of entrepreneurship linked to the local identity and cultural resources. Cultural and territorial knowledge weakens, while there is a countertrend in the productive sector where employment increases. The brain drain continues, and environmental degradation and pollution increase, due to the lack of attention from administrative authorities. The image of Sardinia as a tourism destination is greatly compromised.



6.1.1 +Cement, -Brains – Scenario Characteristics

Societal Characteristics:

- Limited and diffused entrepreneurial capacity as a result of a reduction in investments into new development and cultural strengthening
- Weak diffused culture
- Recovery and enhancement of intellectual specialised emigration
- An increase in social-assisted policies

Economic Characteristics:

- Weak diffused innovation
- More employment in the shipping yards (with discontinuous work contracts)
- An excessive level of specialised or high-qualified unemployment
- Favourable tax policies to attract foreign investments
- Permissiveness in the consumption of environmental resources with a related cost for public finance and community as a whole
- Improvement in the system's competitiveness
- Improvement in the capacity to attract companies, mainly labour-intensive ones (Eg: Logistic services for trans-shipment, maintenance of mechanical means, which very often need a highly qualified work force, even if in this case established firms have already developed all the necessary competencies)
- Higher energy costs

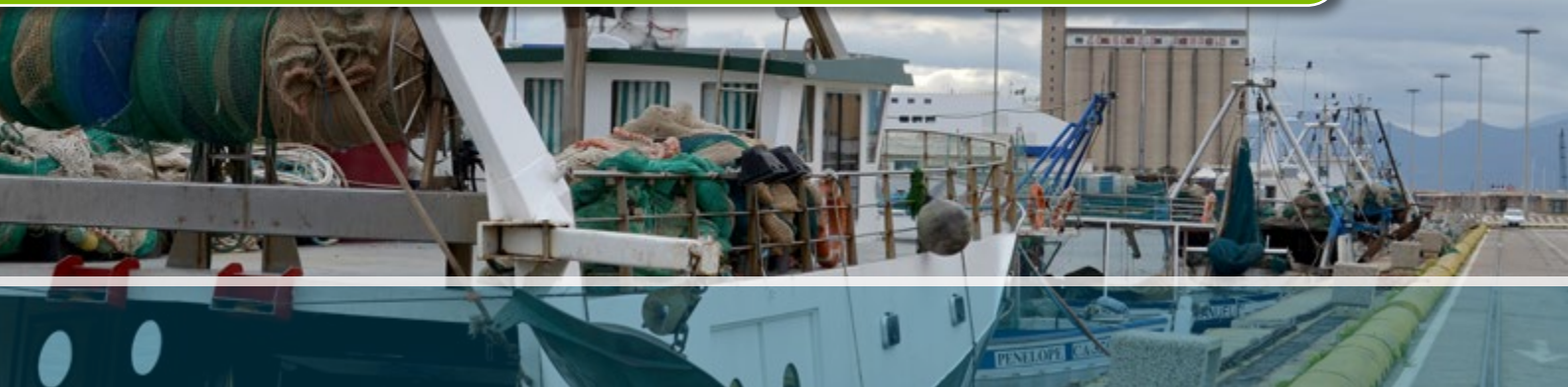
Environmental Characteristics:

- Higher pollution
- More “consumption” of the environment
- Loss in the touristic image of Sardinia
- “Watering” of the “clean agricultural” product's image



6.1.2 +Cement, -Brains – Headline News from the Future

Societal
2015
Better workman than unemployed engineer
2020
Low unemployment as never before...but also brain drain
2030
That's the last number of the "Unione Sarda"
Economic
2015
It's time for opportunities: shipping yards are opening
2020
We are the most interesting ones for Arabian investments
2030
The Aga Khan says "stop it"
Environmental
2015
Now we choose the egg, and then we'll think about the chicken
2020
Once upon a time the shepherd Few brains, a lot of cement
2030
Sahara is the next future



6.2 SCENARIO B – DOOR TO THE MEDITERRANEAN – 2030

This future is characterised by intense development in infrastructures, in order to improve external and internal connections (mainly within the urban areas). Sardinia is intended to develop as a platform at the heart of the Mediterranean, also to connect to North-European and African systems. The increase in the degree of internationalisation of the system has impacts upon population, which has augmented in number, due to the attractiveness produced by the availability of new job possibilities. Around the ports, the new infrastructures, new investments and ancillary activities are set up. The ports are no longer a place where merchandise can just be loaded/offloaded. The ports are also becoming “productive” sites, where value is added to products arriving from outside. New productive industries will be set up, as well as new cooperatives of youngsters engaged in the continuous analysis of markets. These changes have a positive impact on tourism, even indirectly, while environmental conditions improve.

6.2.1 Door to the Mediterranean – Scenario Characteristics

Societal Characteristics:

- Increase in employment due to improvements in infrastructure and activities related to merchandise transformation
- Demographic growth
- Internationalisation of population, through connecting with the rest of Europe
- Setting up of new cooperatives of youngsters focused on innovative markets (specialised work force, planning and continuous market analysis, web, etc.)
- Training activities to promote Sardinia as the heart of the Mediterranean
- Higher attention to safety at work
- Creation of new professional figures and connected diversification of university programmes together with the development of new university centres

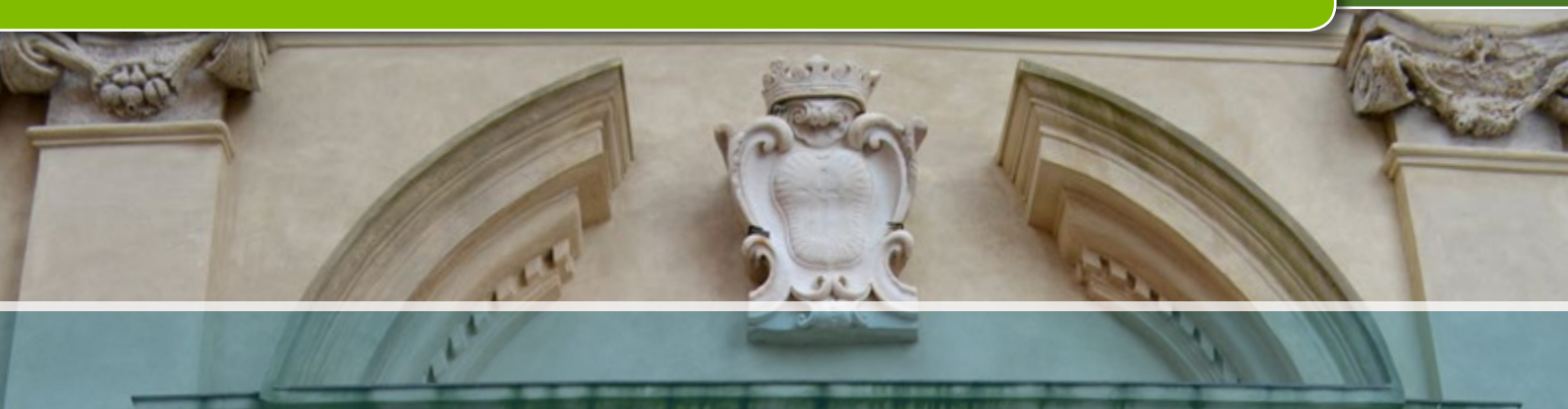


Economic Characteristics:

- Reconversion of existing centres and the creation of new productive firms
- Improvement of logistic infrastructures
- Development of tourism linked to better connections with the rest of Europe
- Growing sustainability of public transport
- Higher territorial continuity, linked to the reduction in insularity and development of more connections
- Attainment of external investments in the territory

Environmental Characteristics:

- Higher environmental sustainability
- Lower impact from CO₂
- Low energy consumption
- Less traffic congestion on the roads (lower social cost connected to accidents), and more railway transportation



6.2.2 Door to the Mediterranean – Headline News from the Future

Societal

2015

Sardinia towards internationalisation

2020

New professional figures arise

2030

From Sardinia, the best-practices

Economic

2015

Duty-free zone becomes a reality

2020

New opportunities for young people
New firms invest in Sardinia

2030

Finally, Sardinia's PIL +9%

Environmental

2015

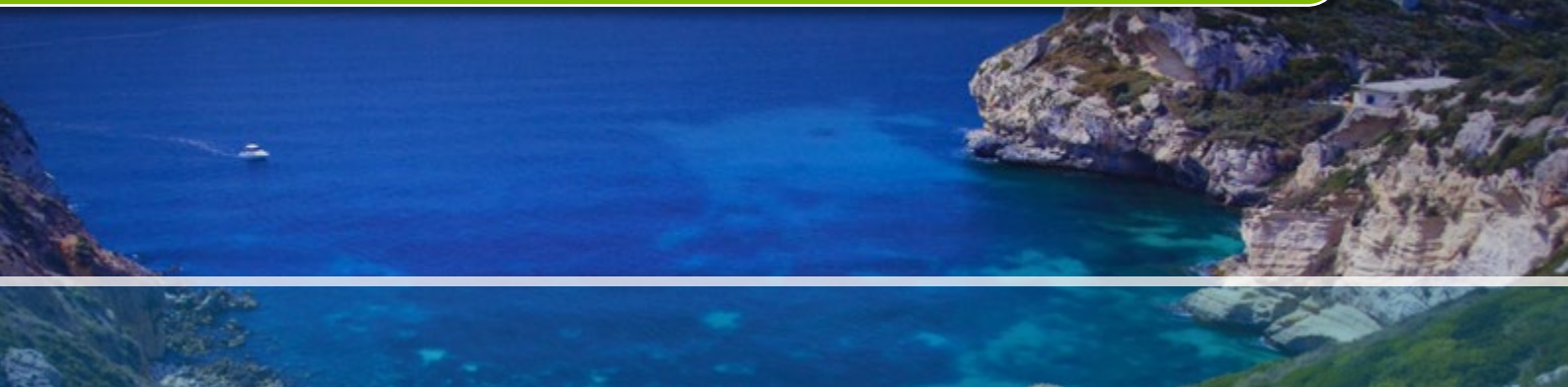
The 131 road is safer after the completion of the new mile

2020

Sardinia is self-sustainable

2030

Thanks to merchandise highways on the railroad, to travel is far more simple



6.3 SCENARIO C – THE DREAMS ISLAND – 2030

This future is characterised by a strong propensity towards high-quality tourism as an attracting element for a high number of international tourists, some of them deciding over time to establish permanently in the territory, contributing to the increase of the resident population. Policies favouring an improvement of integration have developed. Simultaneously, the growth of population is connected to a substantial stall and reduction in the emigration of young people, who decide to invest in their own future within a territory with a high touristic vocation, where entrepreneurship and economic opportunities linked to local specialties and unique natural characteristics are particularly enhanced. These changes foster local agricultural production chains, tourism linked to leisure sailing, but also transport and connection systems, mainly towards internal areas which are thereby revitalised at all levels (economic, social, environmental). From an environmental point of view, more attention is given towards a better reputation of the territory, but also towards what nature can offer to the people living, working and visiting the territory. This leads to a better waste management and to an increasing protection of beaches and forests, thanks to a strong incentive to sustainable tourism.

6.3.1 The Dreams Island – Scenario Characteristics

Societal Characteristics:

- Higher competencies and specialisation in sectors connected to tourism and environment
- Higher employment and job quality
- Increased entrepreneurship
- Decrease in social disadvantage
- Increase in foreign population together with an improvement in integration



Economic Characteristics:

- Definition of a “touristic market” strategy with particular reference to the specific touristic target
- More touristic firms and ancillary activities (agricultural, transports, leisure sailing)
- Increase in the per-capita wealth
- Augmentation and requalification of touristic infrastructures, mainly internal zones

Environmental Characteristics:

- Improvement of recycling and reduction of waste production
- Increase in typical cultivations and breeding farms
- Better protection of beaches and forests, together with an increase in sustainable touristic services



6.3.2 The Dreams Island – Headline News from the Future

Societal

2015

New Master's courses in tourism management

2020

Tourism going great guns, and employment increases by 5%

2030

ISTAT: per-capita income is increasing

Economic

2015

The new strategic tourism plan for the next 15 years

2020

Sardinia becomes competitive all over the global tourism market

2030

Sardinia: preferred destination for the new reach people
Sardinia attracts new capitals in the tourism sector

Environmental

2015

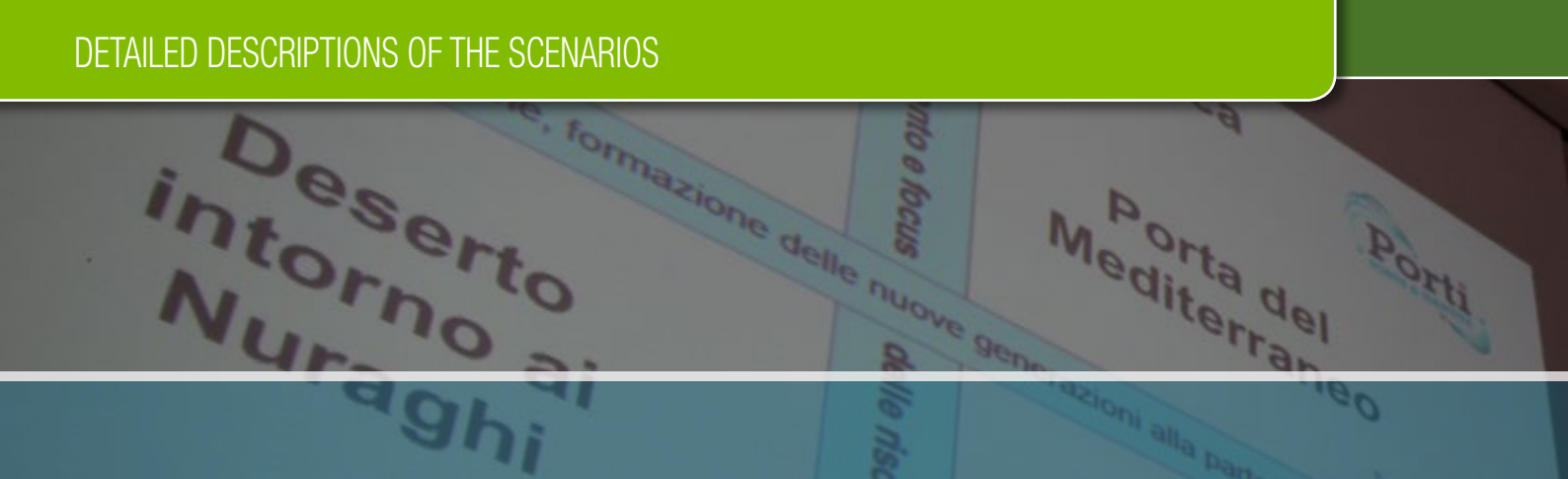
The Region approves the long-lasting programme for landfills' monitoring
Sardinia embraces European objectives

2020

"Europe 2020": goal reached

2030

Energetic self-sufficient:
the majority of accommodation facilities reach the objectives



Deserto
intorno ai
Nuraghi

Porti
del
Mediterraneo

6.4 SCENARIO D – DESERT SURROUNDING THE NURAGHI – 2030

This future is characterised by a cultural (but also physical) “desertification” of the regional territory. Around the “nuraghi” the desert is growing and the feeling of local identity has been lost. This loss is mainly a consequence of the stall and constant reduction in the intensity of the education level, as well as of the strong brain drain and a substantial population dispersion. The region is ageing, towns depopulate and participation is absent even at local level. There is no new “fresh” ruling class. The economic dimension focuses on tourism, which is subjected to an increase in seasonality. Managerial capacities are not yet sufficient to create high-quality tourism and there are restricted impacts upon employment. Regional GDP decreases steadily while external investments augment, to cover the lack of internal decisive managerial capacities. There is a restricted attention towards the environment, due to the development of strongly impactful enterprises and to a higher urbanisation in coastal areas. There is increasing environmental degradation and a worsening of the identity and unique natural characteristics of the territory.

6.4.1 Desert surrounding the Nuraghi – Scenario Characteristics

Societal Characteristics:

- Decrease in education intensity
- Dispersion of schools
- Brain Drain
- Ageing of the population
- Depopulation of internal areas
- Lack of participation: people are subjected to undesired choices
- Loss of cultural and social identity and poor knowledge of their own territory

Economic Characteristics:

- Lack of managerial capacity
- Low quality tourism choices with consequences on the type of jobs available



- Increase in tourism seasonality.
- Prevalence of seasonal and low qualified jobs
- A growth in external investments in the region, with the presence of non-local managerial figures
- A decreasing Sardinian GDP
- Higher capacity for illegal investments (laundering)

Environmental Characteristics:

- People living near to the sea, rather than inland. This leads to an increasingly significant human presence in coastal areas
- Devaluation of environmental, archaeological and historical heritage.
- Impoverishment of the territory: depopulation of internal areas
- Strongly impactful infrastructures
- Non-sustainable tourism



6.4.2 Desert surrounding the Nuraghi – Headline News from the Future

Societal

2015

Schools are scattered (from any viewpoints...)

2020

The Sardinian loses his/her identity

2030

The last “Tziu Giuanni” (the ancient wise-man) has died:
who still speaks Sardinian language?

Economic

2015

In Sardinia GDP -5%

2020

In Sardinia GDP -10%

2030

In Sardinia GDP -20%

Environmental

2015

Alarming coastal erosion

2020

Too much cement: the tourist prefers other destinations

2030

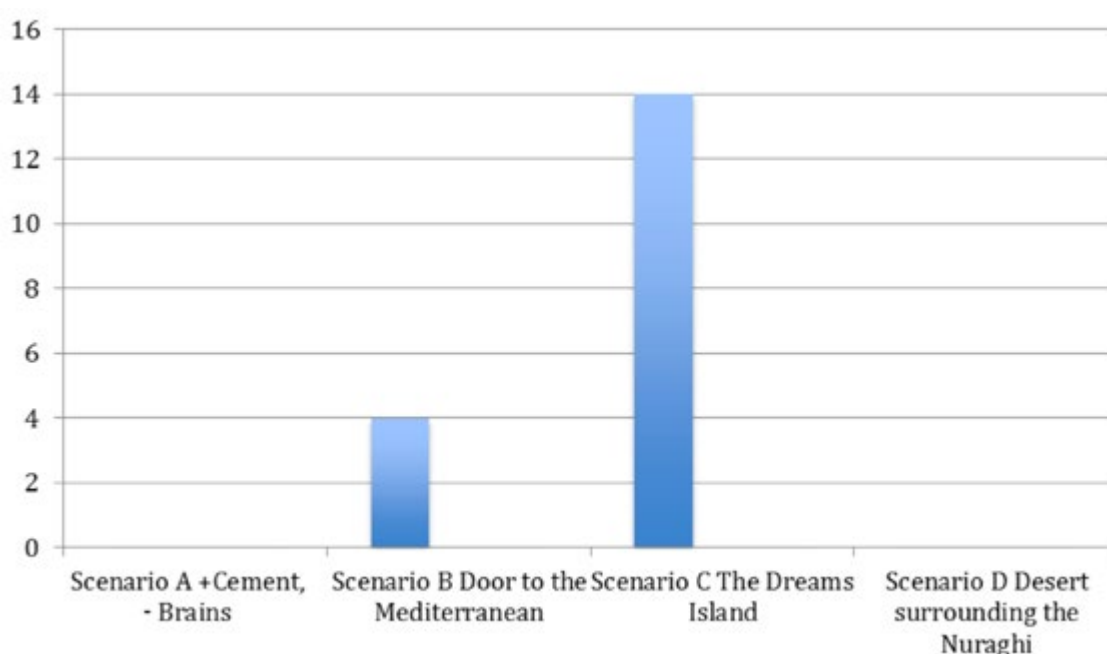
Enchanting beaches do not exist any more. The last Blue Flag has disappeared



7. WORKSHOP PARTICIPANT FEEDBACK

Following the Scenario Planning work, participants were asked which scenario represented their aspirational future, out of the four scenarios.

7.1 PREFERRED SCENARIO - WORKSHOP PARTICIPANTS

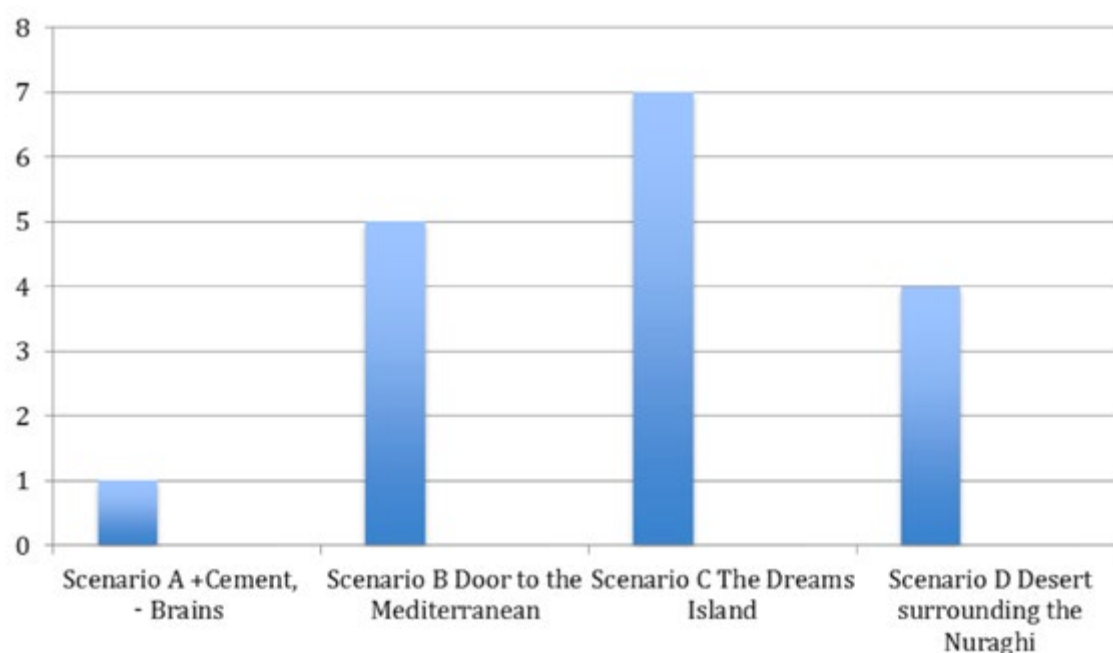


The majority of workshop participants (77%) agreed that Scenario C best represented the preferred future scenario – **'The Dreams Island'**. This future is characterised by a strong propensity towards high-quality tourism as an attracting element for a high number of international tourists, who ultimately decide to reside in the region. Simultaneously, the growth of population is connected to a substantial stall and reduction in the emigration of young people, who decide to invest their own future within the region. 23% of the participants felt that Scenario B represented the preferred future scenario – **'Door to the Mediterranean'**. This future is characterised by intense development in infrastructures, in order to improve external and internal connections (mainly within the urban areas). The increase in the degree of internationalisation of the system impacts also upon population, which has augmented in number, due to



the attractiveness produced by the availability of new job possibilities. Scenario C represents a propensity to tourism, whereas Scenario B focused on external links to external markets.

7.2 WHICH SCENARIO MOST REPRESENTS WHERE THE REGION IS CURRENTLY HEADING?



The workshop participants were not in complete agreement regarding which of the futures the region was currently heading towards. The majority (41%) felt that the region was currently heading towards a future represented by Scenario C '**The Dreams Island**', which interestingly, was the preferred future. 29% felt that the region was heading towards Scenario B '**Door to the Mediterranean**', which represented 23% of the participants' preferred future. 23% felt that the region was heading towards the bleak future of Scenario D '**Desert surrounding the Nuraghi**' and finally 5% felt that Scenario A '**+Cement, -Brains**' represented the expected future.



8. HOW COULD THE PREFERRED FUTURE EVENTUATE?

The preferred future '**The Dreams Island**' outlines the basis of a shared vision for the region. In addition, it gives an indication of the focus areas of action that will begin to see this vision become a reality.

Because of the long-term nature of the Scenario Planning methodology, stakeholders can often see the 'distant future vision (2030)' as unattainable and unrealistic. However, this often underestimates the progress that can be made in the intervening years, and the cumulative positive impacts of change.

The scenario framework also can help guide additional actions to guide the future, especially in the importance of building regional collaboration and capacity. The challenge will be to connect the region to existing efforts and harness the depth of development already occurring in the broader regional context.

The region has an abundance of high quality natural resources as well as an international reputation for tourism. The challenge will be to optimise the resources of the region, and build a cohesive relationship with the other port cities in the North Tyrrhenian Sea area. The region has been seen by the participants as being weak in many aspects, which research has shown contributes to the success of a community. The areas of weakness have been conveyed as a lack of optimism and future focus, a lack of a participatory approach to decision making, the region has been seen as loosely connected with a lack of deliberate transition of power to new leaders. Interestingly, the region was also seen to be weak with regards to having a strong belief and support for education.

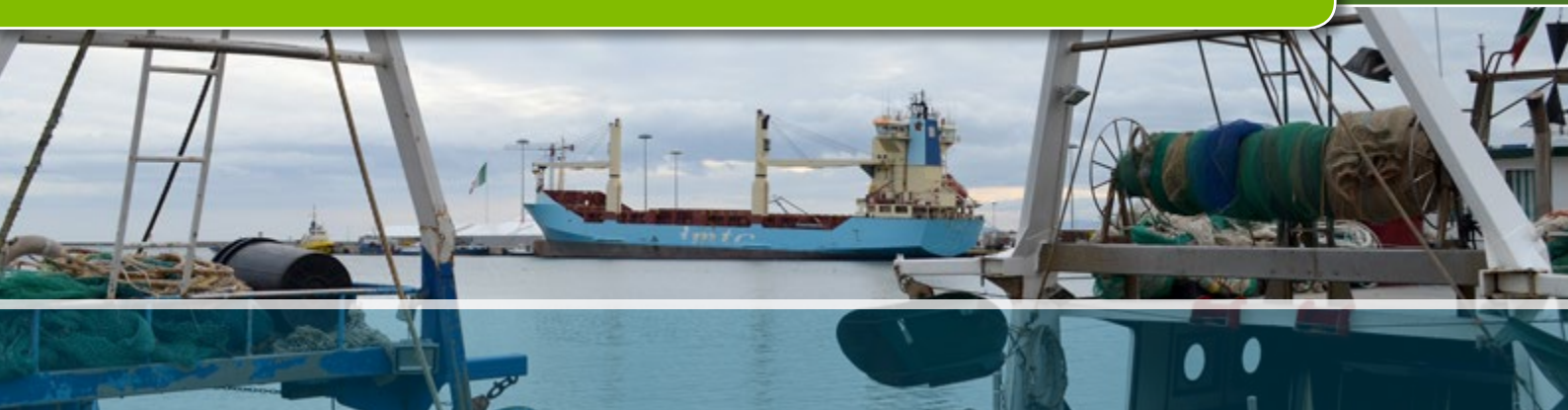
For collaboration to be built with the other port cities, these weakness will have to be examined and reflected in the actions that arise out of the scenario planning workshop.



8.1 KEY ACTION STEPS IDENTIFIED BY PARTICIPANTS

Following on from the identification of the scenarios, and the determination of which scenario depicted their preferred and expected futures, the participants discussed actions for the region. A list was created and prioritised, based upon the agreement within the group. It was agreed that these initiatives and priority actions were needed to be taken in order to achieve the preferred future for the region.

1. “Cleaning the auditory canal”: invert the roles by trying to be get more involved (actions allowing planning institutions to be clearer and to listen, as well as beneficiaries to understand better and to speak a similar language).
2. Increasing participation at exhibitions and trade shows organised in other countries where it is possible to promote the “Sardinian product”.
3. Building evaluation and measurement models on the impact and the effects of the initiatives.
4. Strengthening of the system’s components bringing us closer towards participative processes (CLLD – Community Led Local Development).
5. Promoting the organisation of specific and thematic training initiatives which will have an impact on the client’s selection system (specialisation of the training system).
6. Developing credible simulation models (exploration) on some fundamental issues (Ex. Welcoming capacity).
7. Mapping the deadlocks (Ex. Related to legislative issues such as urban planning).
8. Creating a data base on import/export accounts in Sardinia and making them available and shared (Ex. food balance).
9. Expanding available access to communication networks and services generally used (Digital Agenda, etc.).
10. Developing a study/systemic action to define a rewarding modality for the attribution of public resources (Ex. FSE).



8.2 NEXT STEPS IN THE ACTION PLANNING PROCESS

This report outlines the findings from the scenario planning workshop, carried out for the region of Sardinia as part of the wider PORT Project, which aims to connect the port cities in the North Tyrrhenian Sea. The preferred future Scenario C '**The Dreams Island**' has conveyed that there is a basis for a shared vision for the region. The weaknesses of the region however, indicate that this is much work to do in order to create a cohesive region. It is important that the action points are committed to and delivered upon. While these action points are an adequate start in the move towards collaboration as a region and with the other port cities, they would need to be built upon in order for the region to move towards their preferred future.

Therefore, this workshop is an important step in order to proceed with the subsequent activities over the next months. It is just one of the four Future Think Tank workshops being held in the port cities in the North Tyrrhenian Sea area: Livorno (Tuscany), Camogli (Liguria), Cagliari (Sardinia) and Bastia (Corsica). These workshops are part of a much wider initiative which – thanks to the contributions of the Interinstitutional Laboratory and the work groups which will be realised in each region – could be translated into a joint analysis and in more accurate recommendations.

The final aim is to identify the shared opportunities and to converge towards the main actions which could be considered in a common definition of the Transboundary Strategic Plan.



9. FOR MORE INFORMATION

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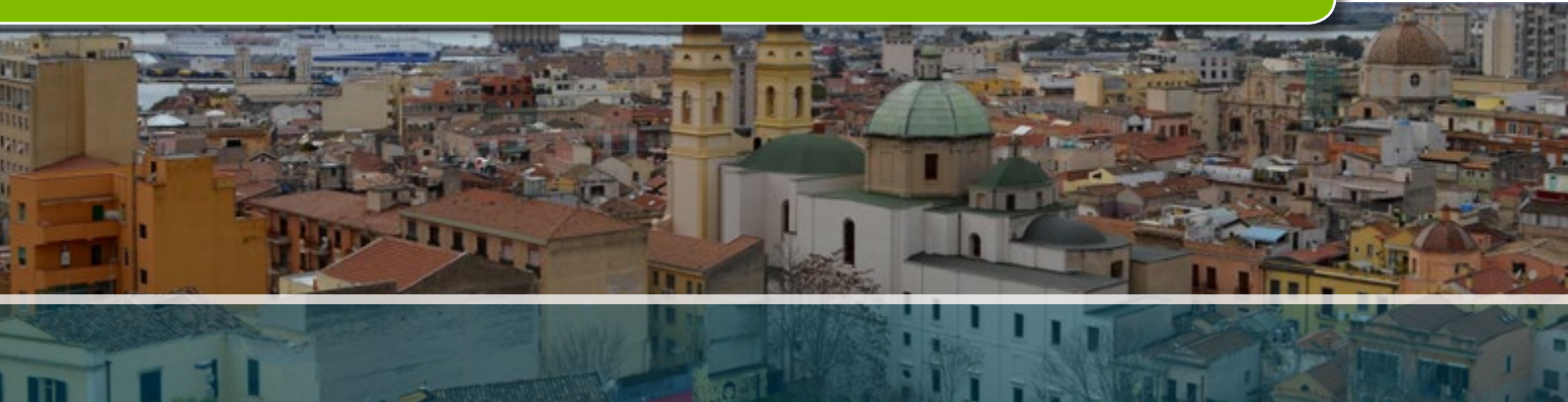
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Report and Scenario Planning workshop prepared by:



PAOLO SANTINELLO, KLINK SRL

Having worked as a system and organisation analyst in public and private settings, Paolo is now actively involved in supporting regional and industry leaders to develop sensible, robust plans to respond to future challenges.



ANNA RODEGHIERO, KLINK SRL

During 15 years as Project Manager, Anna led several international projects to success. She now leads the project development team at Klink, the company she co-founded in 2005.



DAVID BEURLE, FUTURE IQ PARTNERS

As CEO of Future iQ Partners, David specialises in creating future planning approaches for the use in regional, community and organisational settings. David has worked in the field of organisational and regional economic and community planning for over 20 years. His work in community and economic development has earned his work international, national and state awards.



CELINE BEURLE, FUTURE IQ PARTNERS

With an academic background in Sociology and Philosophy, Celine has led many projects and initiatives within her career and is passionate about helping to create effective strategies for communities and organisations. She now is developing the FiQ market in Europe, as Managing Director of Future iQ Europe.



SARA TRENTI, KLINK SRL

Having graduated in Management and Governance at the University of Siena, Sara focuses upon territorial research and the management of regional, community and cross-border projects.



10. CREDIT

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