

Re-active Riviera / competition description

Sealine / MetroPOLIS

Second Prize Winner / lot 2

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The Riviera Competition was launched by Atelier Albania, mandated by the Ministry of Urban Development and Tourism and the Office of the Prime Minister, in 2014. The international design competition was aimed to the improvement of the public space, in the southern coast strip. Such area attracts the majority of the local and international tourists coming to Albania and is a generator for the economy of the whole region especially during the summer. The Reactive Riviera proposal has been developed for such competition by a multidisciplinary team that collect several expertises from Sealine and Metropolis. In its early elaboration it has also been fed by the theoretical contribution of Polis&UniFe's PhD candidates. This mix allowed to accomplish the competition challenges and in some way to go beyond it proposing a "process" more than a "steady" project.

The definition "Reactive Riviera" comes from a research project by Sealine that focuses on comparison, parallel study and feedback between coastal cities and tourist areas pertaining to the Adriatic-Ionian Macroregion. It investigates consolidated and emerging realities:

contexts at different stages of progress in relation to the development of a touristic model. The reference point is the Riviera Romagnola coast. As a mature and extreme territory from this point of view, it represents an example in both positive and negative. Starting from it, the aim is to define new solutions and strategies for emerging contexts, the booming ones – most of them placed in the east Adriatic basin. They have different characteristics, but are increasingly subject to similar dynamics. Emerging realities, in tourism trade, are now in the position to plan their growth after an initial unchecked boom period. Within the Adriatic-Ionian Macroregion public and private subjects are increasingly interested in strategies and devices to address this turning point. Operating here provides the ability to test innovative solutions in less compromised and locked situations. That is the case of Albanian South Coast where the proposal Reactive Riviera has been developed as a first case-study.

Objectives and challenges

The proposal is grounded on the belief that Tourism is the most important



Fig1 / Re-Active Riviera Vision
source / Re-Active Riviera competition panels



source for the Riviera segment, identified as Himara Area, to growth safeguarding and improving its environmental and cultural heritage (i.e. mountain and coastal landscapes, villages and local communities, traditions and identities). This means a low impact development of infrastructures and facilities for both local people and the travellers, cultural heritage and environment. Protection of natural sources requires as well interventions to be planned in the logic of a limited consumption of land beside a strategy to improve accessibility and understanding of natural and cultural sites. In that perspective, Reactive Riviera Project aims to take the opportunity to act in a proactive way. Tourism and Public Aesthetics have the potential to create beneficial effects on the environment by contributing to its valorisation and conservation. They can act as instruments to raise awareness of environmental values and tools to finance protection of natural areas and increase their economic importance. These have been the main objectives and the ambitious challenges of the Reactive Riviera Project. Sustainable, ethical and local are the three important keywords that drive the project. Ideas and proposals focus intersection of environmental, social and economic issues, founding their feasibility on: data survey of environmental conditions, eco balance, potential risks and potential impacts produced (environmental sustainability); assessment of community resilience, local traditions, potential involvement and participation of inhabitants in the changes and growth (social sustainability);

compatibility and balance between investors' expectation and community needs, rights and participation (financial sustainability). In order to address these different tasks, the first issue concerns the interpretation of Albanian Riviera in terms of touristic potential. According to the general reference model described by Luca Emanuelli in the introduction of the book (Chapter 1.3), the components that determine the tourist attractiveness of an urban system or a territory can be studied and related one each other. The "primary component" includes the reasons for the attractiveness of a destination: the territory resources (historical, landscape, environmental) that justify the visit. The "secondary component" includes the services to tourists, receptivity and functions designed to satisfy the accessories needs. The "infrastructure component" includes devices that allow tourists to reach the destination and move in the area. The efficiency of the individual components and their relationships determine the success and attractiveness of the territory from the point of view of tourism. The key factor, however, is represented by the relationship that all of the components are able to engage with the "local community". This relationship field is called "buffer zone". Looking at this scheme it is possible to identify strengths and weaknesses of the Albanian Riviera and, at the same time, to clarify the proposal operation field and its challenges. Here the value of the Primary Component is preponderant. The Albanian Southern coast, seen as a thick and complex territory, shows

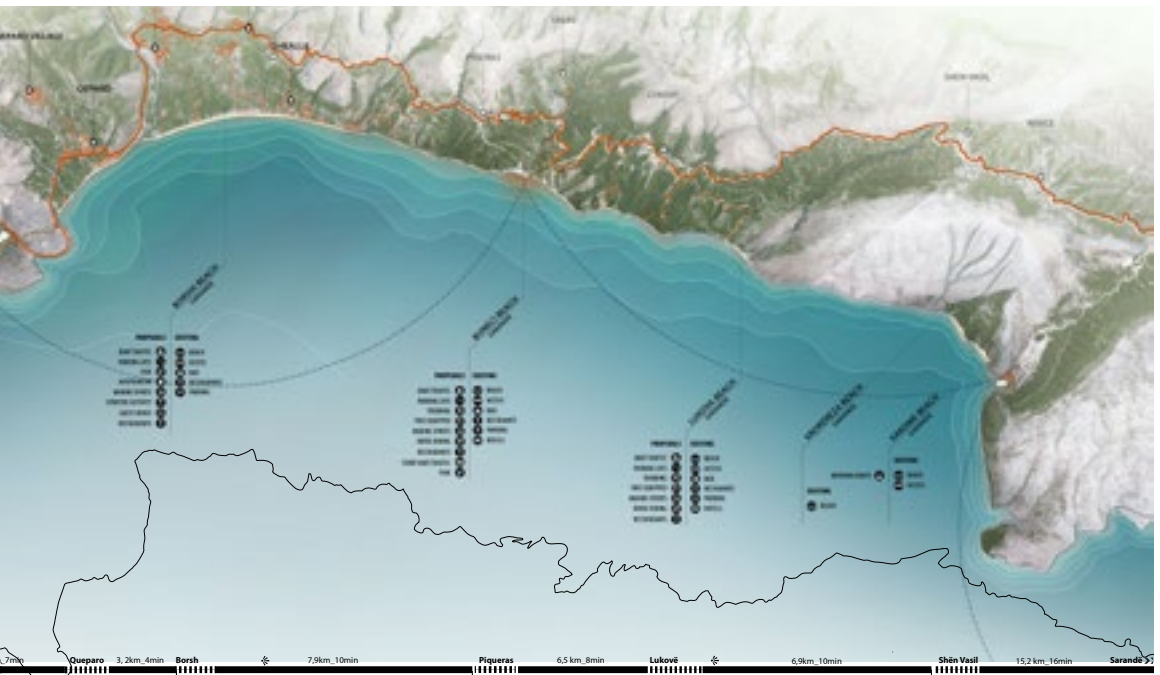


Fig2 / Plan in 1:25000
source / Re-Active Riviera competition panels

its huge attractiveness potential in the fields of: natural environment, leisure and cultural heritage. Beyond that, the role of public aesthetics and the quality of public space via smart design can help not only building a successful economic and financially viable area, but also branding and marketing a totally new international image for Albania, as a world destination. Reaching this goal working on Infrastructure Component is the main challenge to deal with, first of all in terms of transportation. The project aim is to control and drive the infrastructure development toward a smart and sustainable system: connecting mobility systems and transforming the time of travelling in an amazing experience across the Albanian Riviera Landscape and its Art Works and Heritage Sites integrated along the transportation itineraries. Beside that it is fundamental to work on the energy process efficiency in order to support possible facilities developments through renewable sources and a zero-kilometre approach in the energy supply chain. This two main challenges have to be matched by a sustainable financial approach based on principles of business ethics driving the business models beyond the proposal. Some models, in this sense, have been investigated, compared with the available ones in the Albanian legislation and applied to the different situations.

Strategic vision

The project strategic vision is formulated in order to emphasize the mutual relationship between the the primary component and the mobility infrastructural one. In this

sense it aims at boosting accessibility through an infrastructural network based on relevant spots and diverse-scale itineraries (seaborne connections, pedestrian paths, trails). This spots will also support inter-modality between large scale flows and local mobility networks. Working as Touristic hubs, they are meant to be gates for wider territories: allowing to penetrate other adjacent regions of the country - making the whole tourist package of Albanian and their economic program more sustainable; allowing to discover and access unknown landscape and coastal areas - maximizing social and economic impact of strategic public investments, and promote incremental public-private partnership. The proposed interventions concern specific and diverse spots in the territory addressing all the other components of the touristic model. Different types of intervention methods have been planned depending both on the areas conditions and on the possible timing that the strategy of the Reactive Riviera Project should be based on. We propose to extend then the intervention in certain natural, historic, landscape, cultural, religious or destination corridors that start but go beyond the area of the competition, in order to boast the economic impact and maximize the social benefit of the public investments for all Albania.

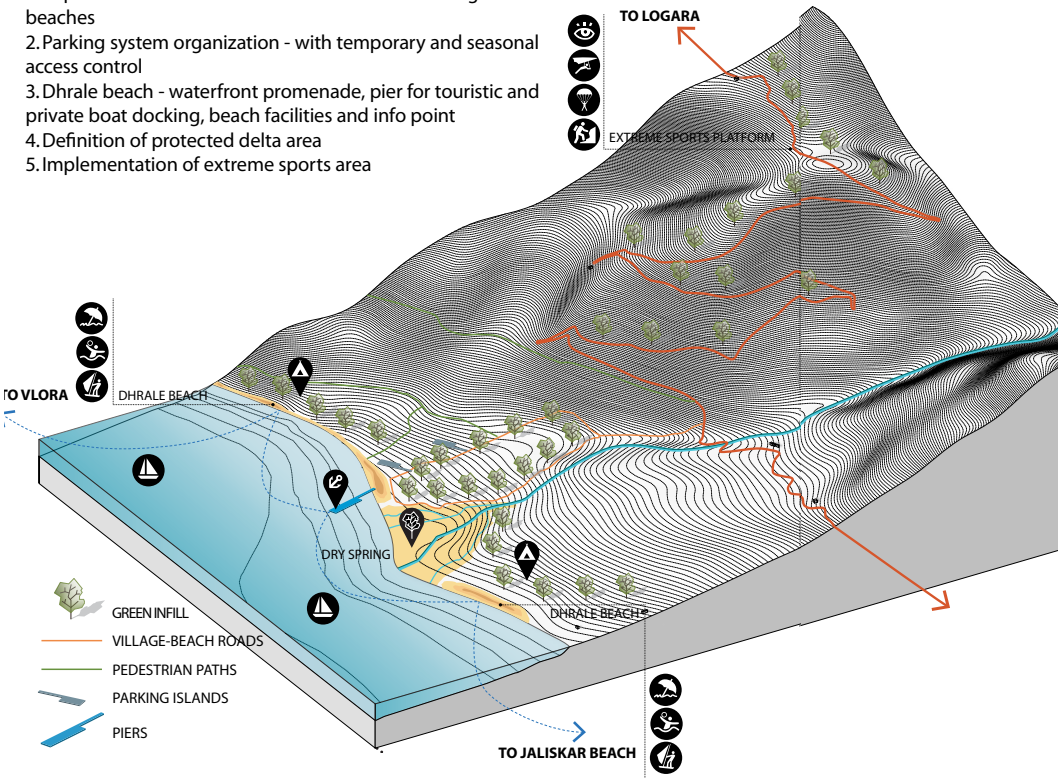
Strategy based on the areas conditions

Based on a first "site-specific analysis" of the areas included in the Lot 2, four different typologies of them have been identified according to the level of impact allowed and to the environmental

PALASA

Key actions:

1. Implementation of road connections between villages and beaches
2. Parking system organization - with temporary and seasonal access control
3. Dhrale beach - waterfront promenade, pier for touristic and private boat docking, beach facilities and info point
4. Definition of protected delta area
5. Implementation of extreme sports area



PALASA-DHERMI

Key actions:

1. Implementation of road connections between villages and beaches; restricted (service) access to the road along Dhermi beach
2. Revitalization of pedestrian historical paths connecting the historical centres and the beach
3. Paving and renewal of the facades in the main plaza of Dhërmi
4. Definition of intermodal nodes
5. Parking system organization - with temporary and seasonal access control
6. Dhërmi beach - waterfront promenade, new public plaza and belvedere, pier for touristic and private boat docking, beach facilities and info point
7. Definition of protected green areas

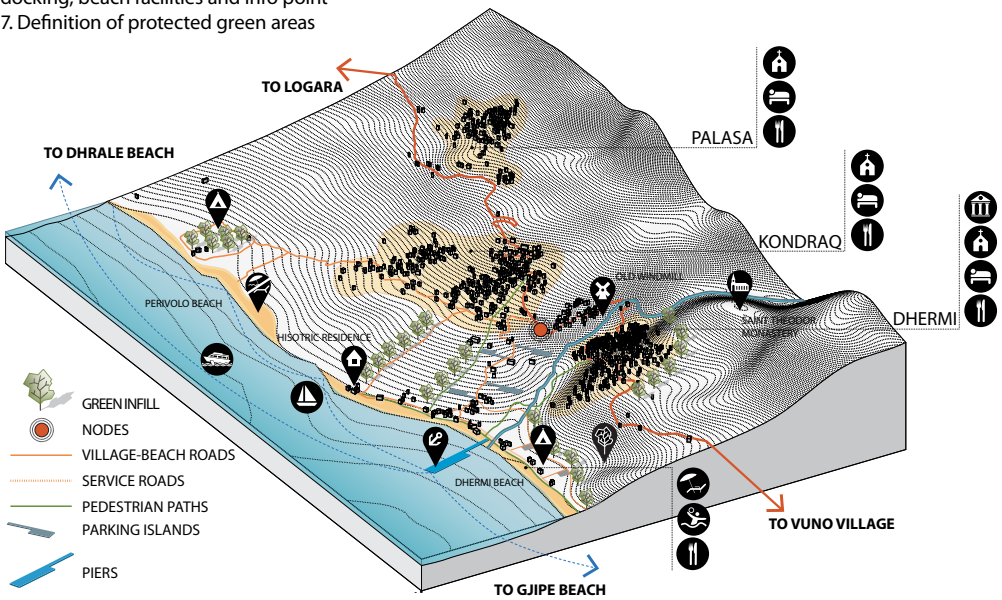
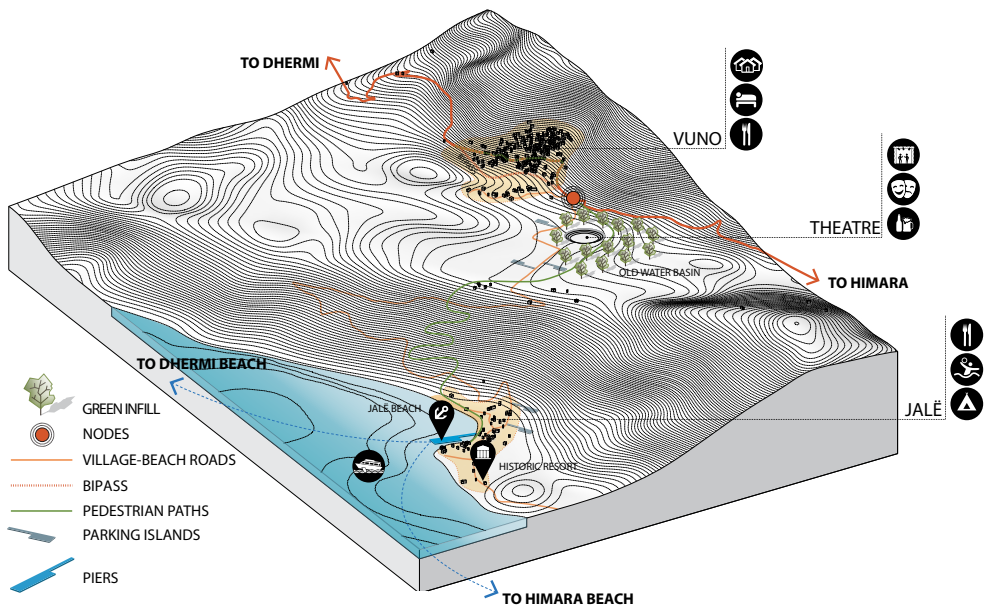


Fig2b / Palasa and Dhermi thematic clusters
source / Re-Active Riviera competition panels

VUNO-JALE

Key actions:

1. Bypass around Vuno village to limit nonresident traffic in the centre of the village
2. Parking system organization - with temporary and seasonal access control
3. Jale beach - pier for touristic and private boat docking, beach facilities and info point
4. Conversion of the old water basin into a theatre arena for concerts and plays and annex facilities



HIMARA

Key actions:

1. Renovation of waterfront promenade to connect all the beaches
2. Linear pine tree park along the promenade
3. Development of urban park and steps
4. Addition of a pier at the end of the main road
5. Reconstruction and extension of the harbour, new harbour terminal, lighthouse, mooring buoys
6. Introduction of new facilities around the stadium
7. Restoration of the pedestrian path to the historic castle of old Himara
8. Reconstruction of the historical square in the old city

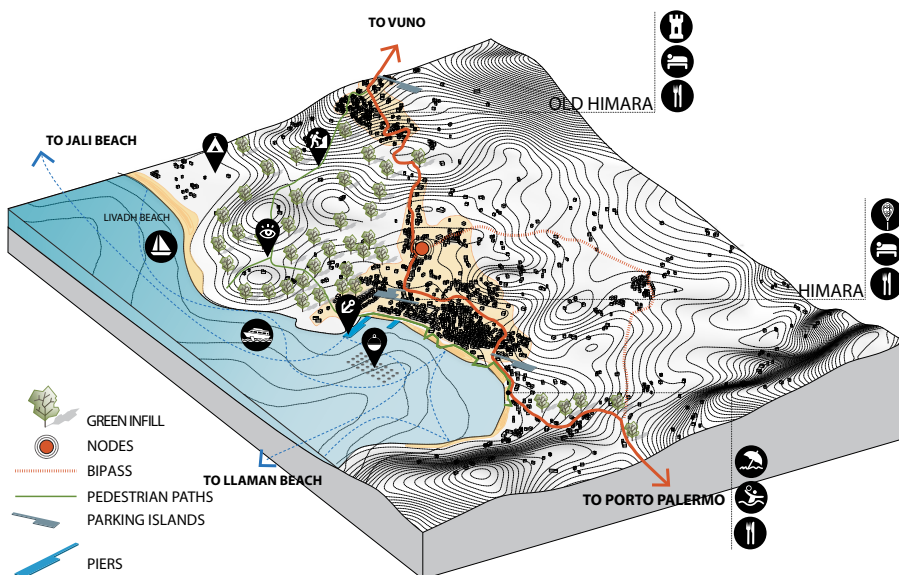
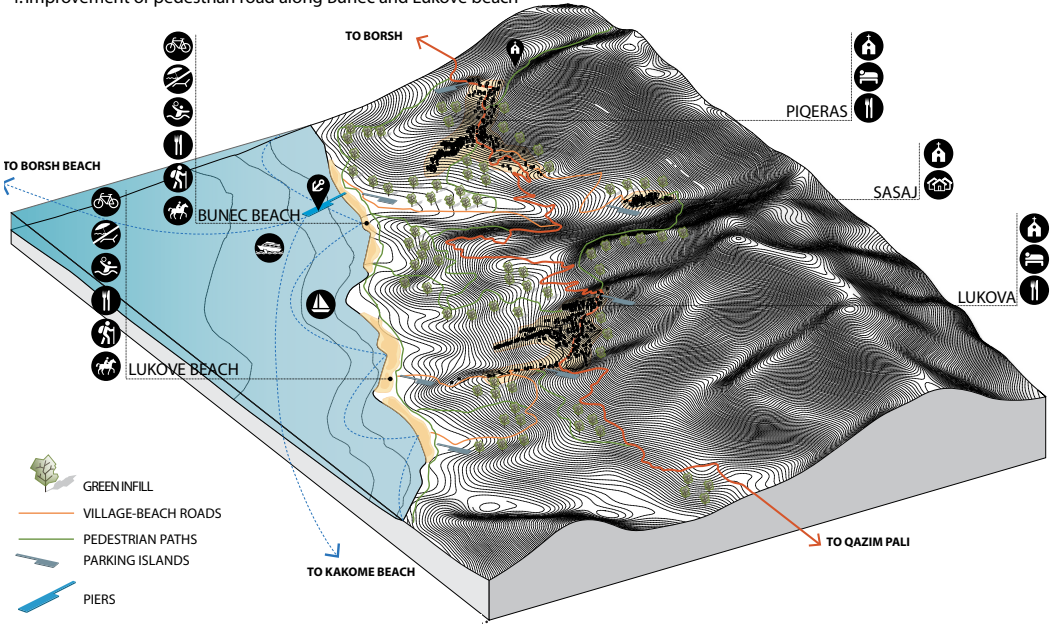


Fig2c / Vuno-Jale and Himara thematic clusters
source / Re-Active Riviera competition panels

PIQERAS-LUKOVE

Key actions:

1. Improvement of trekking and horse riding trails and biking paths starting from the beach area.
2. Implementation of road connections between villages and beaches;
3. Pier for touristic and private boat docking, free equipped beaches
4. Improvement of pedestrian road along Bunec and Lukove beach



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BORSH-QIPARO

Key actions:

1. Improvement of facilities in Qeparo and Borsh beach
2. Borsh central square, Improved accessibility to Borsh castle
3. Revitalization of Old Qeparo village
4. Creation of sports activity area
5. Improved connectivity with the inland by Borsh river valley

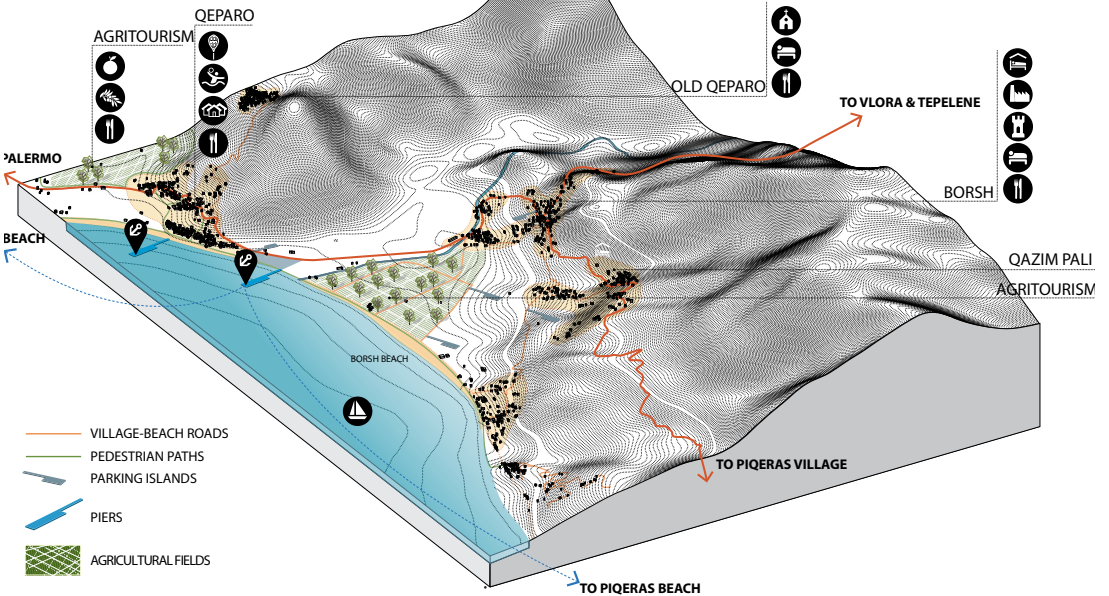


Fig2d / Piqeras-Lukove and Borsh Qiparo thematic clusters
source / Re-Active Riviera competition panels



PORTO PALERMO

Key actions:

1. Addition of mooring buoys and pier
2. Parking system organization
3. Design of an Eco hotel/resort
4. Design of underground buildings for cultural, training and research facilities.
5. Renovation of the path connecting the port with Alipasha Castle

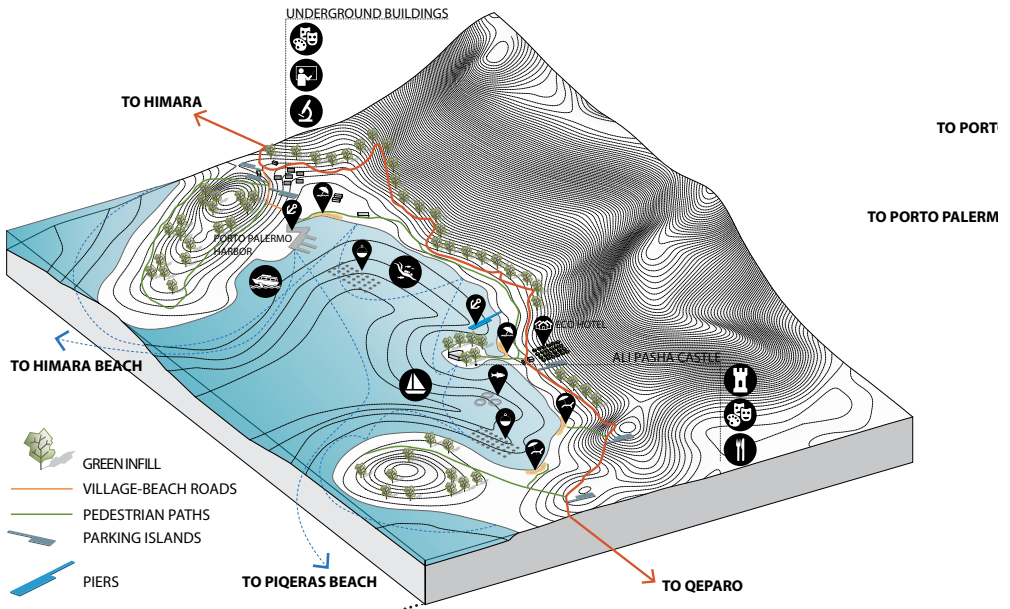


Fig2e / Porto Palermo thematic cluster and view source / Re-Active Riviera competition panels

protection to respect: protected zones, regeneration sites, new low-impact developments and urban areas.

Protected zones The aim is working on connectivity. Regulated accessibility improves the awareness of environmental values meeting the needs of sustainable tourism. This will pay special attention not only to natural and historic areas but also to the environmental hot spots, informal areas or crisis situations that damage the image and qualities of protected zones, along way or adjacent to such destinations. In the totally safeguarded areas the RR proposes solutions for improving accessibility and understanding of cultural and environmental heritage (i.e. light tourist facilities to improve accessibility to villages, beaches, and cultural sites).

Regeneration sites The aim is working on the efficiency of urban destination stressed by increasing tourism flows. The upgrade of the hosting system has to impact local communities' economy and the quality of public space via innovative urban planning exercises and flexible actions of urban design and inspiring art or landscaping works. In the areas where "low impact" interventions are allowed proposals are focused on the improvement of infrastructures and facilities addressed to a policy for a progressive growing of tourism. The development of coastal infrastructures (as well as short sea shipping, docks and marinas, rehabilitation of beach-scapes, etc.) and a strategy of regeneration and refurbishment of small coastal settlements and villages are the focus of the project.

New low-impact developments The aim is working on brand new leading infrastructure according to sustainability and smart cities standards. An innovative model acts as example and driver for other areas pushing the entire touristic sector. This might be the backbone for the marketing and branding of the Albania Riviera: selected sites and landmarks able to introduce this territory on a global stage. The seafront line is the "sea side" of the coastal infrastructures including maritime terminals (mainly for tourist transportation), pleasure boats facilities and other light works aiming at improving the mobility along the coast.

Urban areas Proposals for the urban areas include regeneration of waterfronts, improvement and implementation of urban furniture, implementation of infrastructures for a more extensive use of renewable resources.

Strategy based on a time-scale

Reactive Riviera proposes a phased

approach aiming to steer a gradual development of the strategic programme. Priorities, feasibility and sustainability of interventions drive the definition of a timetable for the whole process. Each proposal has been "scored" according to the growing strategy and a sequence of steps has been scheduled inside each single intervention as well. The working plan of the Reactive Riviera Project should be implemented after a preliminary and in depth analysis of environmental, social and economics issues focused on: the peculiarity of environmental characteristics and condition of each site; the needs and requirements of local communities and municipalities; the market indicators, applicable business models, sensitivity analysis, appropriate eco-fin models, juridical and legislative frame.

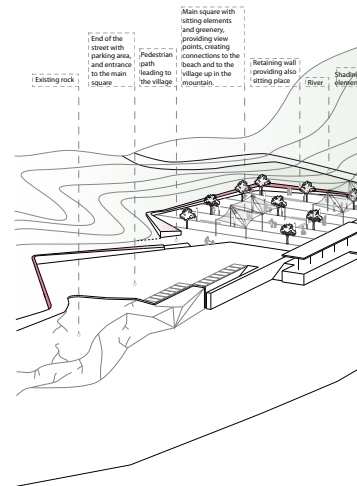
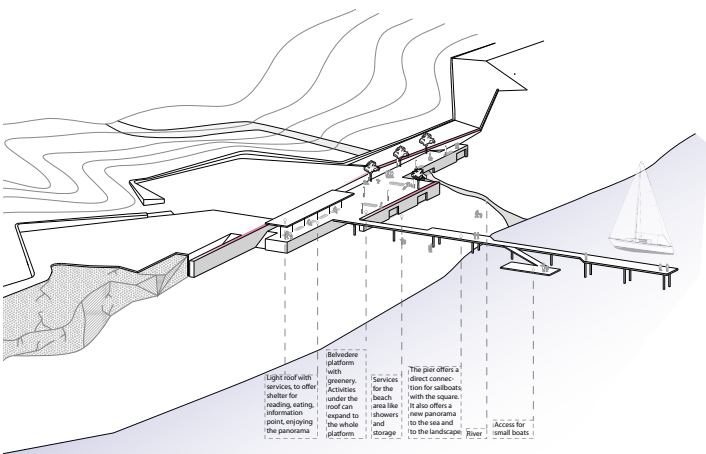
Short/medium term Short and medium term strategies consider light and low cost interventions that could start in the small villages and could include: renovation of public spaces, facilities for beach areas, pathways for connecting villages, etc. Within these timelines it is possible to start the implementation of a network of sea shipping and maritime terminals to connect the villages each other and with the larger terminals of Durres, Vlore, Saranda and Corfù. This maritime network, at its starting stage, is feasible within a short space of time and it does not require expensive infrastructures. It is a good solution for an eco-sustainable tourism as well.

Medium term The medium term strategy follows the previous one: the seaside infrastructures increase (also with the contribution of private investors) implementing new facilities, the local entrepreneurs grow up in the tourist sector. A sustainable energy policy and a strategy of subsidies for the inhabitants of the small villages could support the refurbishment and improvement of houses expanding the accommodation capacity based on the "albergo diffuso" model ("widespread hotel" or "virtual hotel" is an innovative concept of hospitality, was launched in Italy in the early 1980s). In this stage the internal pathways (including new types of path as well as trekking tracks, bike paths and horse tracks) and sea shipping network should extend.

Medium/long term Strategies at the medium and long term will correspond to a change of scale: the interventions are related to their effect on a larger area including other national and international sites and bigger infrastructures (airports, ports, motorways). Investments and

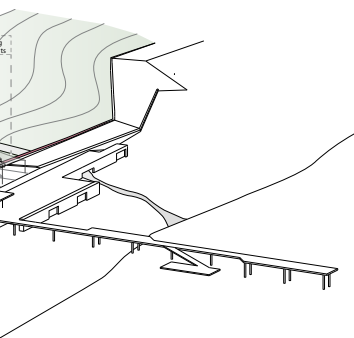


connection with the sea





connection with the land



connection with the beach

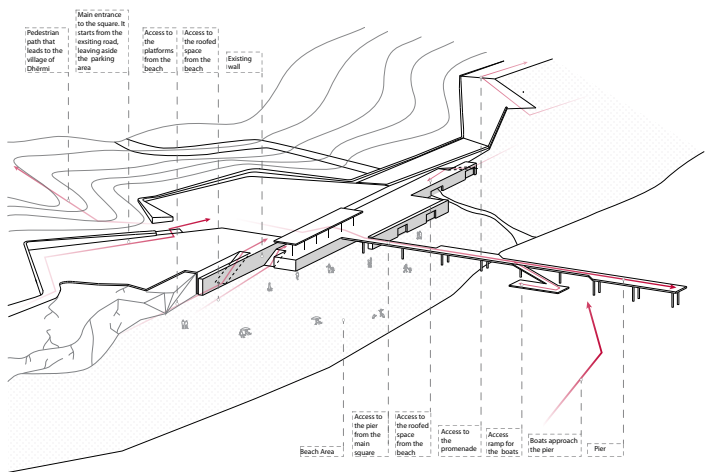


Fig5 / Dhermi Sea Plaza / Masterplan, diagrams and view source / Re-Active Riviera competition panels



business models are based, at this stage, on various typologies and levels of PPP policies. The seaside infrastructures (marinas, beaches, resorts, etc.) increase and consolidate their facilities, villages and tourist sites become bases for national and international sporting, arts and cultural events, accommodation facilities widen their capacity and improve their offer.

Sustainable energy policies

The choices in terms of energy policy that has been adopted in the development of the master plan can be summarized through the following three keywords: energy process efficiency, renewable sources, zero-kilometre approach in the waste management and in the energy supply chain. Energy process efficiency means that the first aim of the project is to retrofit the existing energy supply chain rather than to install new large power plant. In a territory such the one of Himara District, at the actual state of the art, there are different actors, agriculture, services, housing, tourism, each characterized by its specific energy pattern, but however all of them see the peak of the demand concentrated during daytime hours. The future expectation of a strong development of the tourist sector will not change this general picture.

If it is true that in Albania a big fraction of the demand is already satisfied thanks to hydro power (in 2012 1446 MW over 1695 MW country production capacity was from hydro power station), but there is still a strong potential in the development of local distributed small and micro power stations directly feeding the local end

users, the small cities and the villages. The shortening of the energy supply chain, besides, has the potential both to reduce the energy grid transmission losses and to reduce the risk of black out.

The development of the last policy can be fulfilled though two steps acting on different segments of the demand structure. The first action consists in the installation of plants able to cut the daily peak of consumptions. Photovoltaic plants, in particular, have the potential to produce electricity exactly at the same time the electricity demand show its peak. The fact that the peak of demand and production perfectly coalesce is very desirable especially in the touristic sector: even though the target of the master plan is to provide instruments that will allow an all year long tourist season, it is obvious that the highest number of visitors will come in Summer causing the highest demand as well. Since the latitude and the solar potential of Albanian coast, and in accordance to what has been recorded in the last years in solar-fed facilities located in Puglia and Basilicata, one can expect a very high production during the Summer months, when the tourism will be in high season, and a lower generation of electricity, in any case adequate to satisfy at least the demand, during the other months of the year.

Another important issue, associated to the implementation of PV plants is the possibility of installing heat pump fed by electricity to replace old and pollutant fossil fuel boilers. The climate of the Himara region is in fact ideal for the operation of heat pumps. These system operating at



Fig6 / Vuno and Jale Events Catalyst, view source / Re-Active Riviera competition panels



Fig6 / Vuno and Jale Events Catalyst, masterplan source / Re-Active Riviera competition panels



Fig7 / Borsh and Qeparo Wellnes Park, masterplan and view
source / Re-Active Riviera competition panels

the highest thermodynamic efficiency (especially when coupled with renewable plants), can assure a complete fulfil of the demand (both electrical and thermal) resulting environmental friendly and cost effective as well. Since the lowering costs of photovoltaic and heat pump, today they are already in a market grid parity if compared to the traditional systems, and they can hence guarantee the return of the investment in no more than 6-7 years. Wind turbines are another technology that can be recommended at a master plan level, since they allow to exploit an important energy resource available especially close to the coast. According to the data provided by the Albania Energy Association, the coastal region of Himara shows an interesting potential in terms of wind energy. However it is important to underline that, since the specific demand coming from a territory where there very few energy intensive end users are settled, and stated that the country industry demand already is fed thanks to large plants, it is more advisable to investigate the installation of local smaller wind turbines directly feeding local grids, rather than build brand new wind farms with the related infrastructures.

Recent advances in smaller-scale wind turbines research, in fact, have led to the commercialization of small products in the range of 60-120 kW that perfectly fit with the local demand. These machines have rotors (25-30 meters) with characteristic similar to the bigger ones but have been designed to operate at the range of the lower wind velocities resulting in an excellent use of the resource limiting the hub height at no more than 40 meters. The power output allows easy connections to local existing grids as well, avoiding the necessity of larger infrastructures such as substations and/or new high voltage cable lines. However the main limit of solar and wind technologies is the uncertainty of their operations. The perfect match between demand and photovoltaic output curves and the possibilities coming from the adoption of heat pump fed by photovoltaic systems, of course can help a lot in lowering the former weakness, but there is the necessity to find other complementary solutions to come to a full optimization. The ideal solution is the installation of small hydro plant to exploit the existing head, naturally created by the same shape of the coastal territory, with mountains directly surmounting the seafloor.

Pelton turbines, for instance, can operate even at low water flow rate in case of relevant geodetic head. These systems

can be diffusely installed and have the potential to provide enough electricity to a whole village: they are too small to be industrial plants, but enough big to be cost effective in the supply of the local demand. Since the small scale of the architectural buildings hosting the plants, several solutions can be investigated, in some case adopting underground installation for the plants absolutely neutral from the environmental and landscape point of view. The electricity produced thanks to this run-of-river plants, being reliable and continuous in time, can hence harmonize the one coming from the photovoltaic plants both to supply electrical and thermal (though heat pumps) end uses.

Finally in the near future there will be a growing interest towards the installation of small micro-combined heat and power (CHP) plant fed by biomasses (mainly wood chips). In recent years small CHP have been already launched in the energy market and, even though their cost is still rather high, there are some small scale machines (electrical output ranging from 25 to 50 kW) that already results cost effective especially in the cases where biomasses is not bought in the market but directly provided thanks to a self-managed supply chain (e.g. fallen branches collecting, wood cleaning, etc.). The last systems allow a tailor made solutions to satisfy the entire energy demand of a the associated facility permitting in certain case even small local district heating plant configuration maximizing hence the energy and environmental benefits also creating jobs both in the biomass supply chain and in the energy network management.

Sustainable financial approaches Impact investing

The approach that we propose is commonly known as Impact Investing. Impact investing means to insert an ethical element in the sustainability paradigm. In other words, our objective is to develop projects which present:

- Economic and financial sustainability. The projects must be conceived and structured so that they reward the investors with the expected return.

- Environmental sustainability. All aspects of the projects strategy and design should be environmentally friendly and respectful.

- Social sustainability. (i.e. the ethical component) A part of the profit of each project is allocated to social programs. The goal of our social programs is not charity but to increase the quality of life in the long-run by promoting high education and local entrepreneurship.

A possibility – which we have already experienced elsewhere successfully – is to use some of the impact funds to fund research and educational programs jointly developed by the local and international universities.

From an operational point of view this can be achieved by creating a non-profit company, with private-public governance, that not only will manage the funds deriving from the Riviera investment projects but also will look for additional funds on an international scale. The eco-fin sustainability is a necessary condition of a successful investment project. The Business Plan is the tool that describes the market scenario, defines the project assumptions, and elaborates the eco-fin projections in order to estimate – with a certain degree of confidence – the likelihood of success, in terms of Net Present Value, Internal Rate of Return or other eco-fin parameters.

Key issues

The initiatives that will involve the participation of private investors can be divided in 2 macro-categories: Full ownership (e.g. a real estate operation where the investor acquires the land); Concession (e.g. a marina where the investor benefits from the management of the infrastructure for a defined number of years). The first case requires a public auction of the land, most likely not only based on the price but also on the technical project and the positive externalities to the local communities. In the second case a PPP / PFI procedure will apply: Project Financing launched by Public Authorities with project base guidelines (large projects); Project Financing proposed by private investors (small projects); Specific procedures for waterfront / marine initiatives (e.g. L 509 / 1997 - Italy); Public-Private companies; Investment attraction. There are 2 issues that must be taken in account in order to attract international investors:

Financing Smaller projects could be fully-equity funded but the possibility of applying a gearing makes the projects more appealing for equity investors. The financing for smaller projects should be available with the local financial institutions which therefore must be included in the loop from day one.

Real Estate operations should consider pre-sales and separate the transfer of serviced land (1st phase) with the transfer of the actual residential units (2nd phase) to lower the financial leverage needed.

In operations in concession (e.g. marinas and similar initiatives) the financing from

local institutions becomes critical. It is very unlikely to find financing from abroad because of the exchange risk and the size of these initiatives. All operations should be considered and structured on a Project Finance scheme, i.e. non-recourse. Nevertheless, the presence of the equity and / or quasi-equity part should be ensured at start. Financing institutions should guarantee their loans through bonds on the land or pledges on the shares. Large projects: larger projects may require a higher gearing and therefore, the participation of international financial institutions. Some sort of guarantee or hedging on the exchange rate should put in place. In any case full backing by the Government should be structured especially concerning the infrastructure projects with long-term concession. Alternative structures of funding such as corporate bonds offering should be considered. Equity and mezzanine finance will have to be looked for on the international capital markets. Therefore, the positioning on the efficient frontier, a transparent juridical frame and a robust Government support are decisive. A good communication and marketing strategy with the participation to worldwide fairs like the MAPIC at Cannes (France) must be organized.

Steering team A steering team which defines the terms and conditions, establishes the strategic overview and leads the operations is critical to success. This steering could be formed by Government representatives, specialist from Institutions like Universities or Research Labs and private companies and professionals. Know-how, transparency, institutionalization, local and international experience should be the criteria of selection of the members of the steering team.

Pilot projects

Pilot projects should have different objectives:

- create a track record i.e. show to a larger audience that investing in the Riviera is a good deal;
- demonstrate that the sustainability paradigm is robust and the best way to go;
- test and fine-tune the strategic structure and the operational machine including the steering team that will establish the criteria and that will guide the future phases of more significant development projects;
- test the current legal frame and evaluate potential improvements / integrations for the larger projects;
- test the current financial climate and



Fig8 / Porto Palermo Maritime Cluster, masterplan and view
source / Re-Active Riviera competition panels

identify the critical instruments for the larger projects;

- generate an initial turnover with a seeds of investments which will involve the local communities.

Therefore, all the aspects of larger projects should be present in the pilot projects:

- pilot projects must already be inserted in a larger masterplan of portfolio investments that foresees a significant scalability;
- they should move from a rigorous Business Plan;
- the impact approach should be applied to these initiatives (with the participation of the local communities and the educational / research programs);
- a marketing and communication strategy

should be implemented at an international level;

- a rigorous quantitative approach should be applied in the construction of the eco-fin model.

Design Actions

On such integrated approach the RR project has been developed focusing on different contexts along the coastline chosen for their strategic status within the territory. Each detailed project has been implemented according to the general guidelines and interpreted as a case-study in order to achieve specific intervention devices and tactics to be used in other similar spots along the Riviera.