

PUNTA ROSSA

location: caprera coordinates: 41°10,30'N - 9°28,07'E

the settlement of punta rossa is a didactic and research pole which delve into boat design and nautical material technologies for the development of dinghy sailing. it offers open sevices and support to mariners, visitors and tourists and can host seminars, workshops and courses on site, offering suitable spaces and structures.











• preavious functions mines storage. warehouses.

• dimensions

surface: 477 m² + 142 m² + 75 m² volumetry: 4.290 m³

• more

southern warehouse and eastern part of the storage with intact coverage. practicable entrances and widows without obstructions. most of the entrances have been walled up.





scale 1:500

31%



carpentry workshop:

it offers the opportunity to carry out carpentry works on the boat or sail repairs and can host local craftsmen. 117 m²

teaching laboratory:

it has the space to experiment and work practically on the studied subject with different elements, material and techniques. 215 m²



• new functions "mooring structure".

teaching laboratory. carpentry workshop.

• details

the wide spaces for practical activities are an integration to the classrooms for didactic purposes. the carpentry and "mooring structure" offer a service to internal and external users.



"mooring" coverage: integrated photovoltaic system with 16 kWp and a

potential productivity of 22.600 kWh/year. 134 m²

"mooring structure": emergency shelter for

inside and outside users which can host max. 8 people for a short period. it has a toilet, a cupboard and a small kitchen. 58 m²

laboratory coverage:

integrated photovoltaic system with 34 kWp and a potential productivity of 46.000 kWh/year. 275 m²

teaching laboratory:

it has the space to experiment and work practically on the studied subject with different elements, material and techniques. 215 m²





- preavious function detonators storage.
- dimensions surface: 305 m² volumetry: 1.470 m³
- more

intact coverage. practicable widows without obstructions. entrances with doors. eight of the twelve windows has been walled up.







canteen:

it can be used also as common space and gathering point. 185 m²



• **new function** canteen / bar.

details

the structure is a service for the settlement, working for inside but also for outside users which can gather from the nearby structure. it can be lead by local restaurateur.





- preavious functions loundry / restroom. site chief accomodation.
- dimensions surface: 80 m² + 104 m²

volumetry: 860 m³

• more

small portion of the chief accomodation roof has collapsed. entrances and windows of the chief accomodation have been walled up. the windows of the restroom have iron gratings and frames.





scale 1:500





water cistern

loundry / restroom

• new functions

loundry / restroom. office for the energy management.

details

the loundry / restroom is a service for inside and outside users taking also advantage from the contiguous cistern.

the office for energy management coordinates and control the energy production system and is linked to the other offices of the archipelago network. office fot the energy management





- preavious function dormitory.
- dimensions surface: 523 m² volumetry: 2.080 m³
- more

intact coverage. practicable entrances and widows without obstructions.





23%



classroom:

capacity for ≈18 people. 90 m²



• new functions classrooms / stationery.

details

four classrooms, which can be joined two by two, for didactical purpose in the nautical field, such as for example boat design, nautical engeneering or event organization.





- preavious function pantry / kitchen.
- dimensions surface: 130 m² volumetry: 794 m³
- more

most part of the coverage has collapsed. all the entrances and windows have been walled up. the building has a surrounding wall on the northern and eastern part.





7%





closed but not covered area which divides the working space from the "cabin" making the two spaces independent. 17 m²

new function

archipelago network spot / national park office.

details

the structure offers information about the archipelago to the visitors but is also an organization and coordination center for the whole network. the reconstruction of the roof offers the opportunity to integrate a photovoltaic system.





- preavious function site chief accomodation / office.
- dimensions surface: 182 m² volumetry: 665 m³

• more

intact coverage. practicable entrance don't have any obstructions. most of the windows have iron gratings and frames. small stone fence in front of the house door.







7%



it is located at the entrance and has a small consultation corner. 80 m²

• new function library.

• details

a small library, managed by the municipal library, offers to the inside and outside users a research and study area. the garden can be partially covered and used as an outside area with tables and seats. moreover the nearby cistern will be reactivate for water collecting.





water cistern





- preavious functions guardhouse. warehouse.
- dimensions surface: 78 m² + 48 m²

volumetry: 745 m³

• more

guardhouse and a small part of the warehouse with intact coverage. practicable widows without obstructions. entrances have been walled up. guardhouse with an elevated positidn<u>200</u>





scale 1:500 16%







classroom coverage:

integrated photovoltaic system with 12 kWp and a potential productivity of 17.200 kWh/year. 102 m²

energy warehouse:

technical space for the energy resource management. 61 m²



• new functions weatherstation. energy warehouse.

details

the weatherstation interact with the other terminals in the archipelago to guarantee a full metereological and climatic overview. the energy warehouse is where the producted energy is stored and controlled.



weatherstation:

weather data

management. 22 m²

technical space for the





• preavious function ammunition depots.

• dimensions

surface: 120 m² (+ 1.530 m² of fence) volumetry: 360 m³

• more

one of the three deposit has collapsed. most part of the coverage has collapsed. the entrance of the enclosure has been walled up. a thick vegetation covers the whole suggace.













interaction relevance

future development: caprera as an open air museum with regulated car access.

polytechnic nautical school



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stagnali research pole





PORTO PALMA

location: caprera coordinates: 41°11,30'N - 9°27,01'E

the settlement of porto palma is a didactic pole which is dedicated to the training of regatta teams and improvement of sailing instructors, the structure works joint to the centro velico caprera which will manage it, and offers open services and support mainly to mariners.











• preavious function antisubmarine nets and torpedos storages.

• dimensions surface: 1.923 m² volumetry: 17.180 m³

• more

most of the coverage presents high levels of decay due mainly to rust.

most of practicable entrances and widows with frames and iron gratings.



210





new function

training pole for sailing boat instructors and regatta teams.

details

the structure has a didactic purpose and can host lectures, workshop and training sessions for regatta teams which can practice in the archipelago. the center is also a formation and refresher pole for the instructors of the different schools which can gather from different part of the world following courses and seminars.











PUNTA SASSU

location: santo stefano coordinates: 41°12,25'N - 9°25,09'E

the settlement of punta sassu is a didactic and research pole which delve into water pollution and marine environment. it offers support services to mariners and can host small seminars, workshops and courses on site offering suitable spaces and structures.










- preavious functions n.a.
- dimensions surface: 153 m² + 151 m² + 130 m² volumetry: 1.260 m³

• more

the buildings have intact coverage while the shed has a rusty cover. practicable entrances and widows with frames. some windows have been walled

up.



scale 1:500

51%





research laboratory

new functions

classrooms. research laboratories.

• details

the shed has been converted in a light but closed structure which can host a classroom and has a photovoltaic system integrated in the roof. the research laboratories offer additional working space to the main research center.



classroom



2nd floor classroom

1st floor classroom





- preavious function n.a.
- dimensions surface: 131 m² + 15 m² volumetry: 700 m³
- more

the coverage has completely collapsed. practicable entrances and widows without obstructions. some of the windows have been walled up.







and organization material. 9 m²

archipelago network spot:

workspace for the coordination of the network and organization of the services offered by the archipelago. small waiting room and toilets. 77 m²

offices coverage: integrated photovoltaic system with 22 kWp and a potential productivity of 30.000 kWh/year. 178 m²

national park office:

coordination of the national park ativities and collaboration with the archipelago network resources and services. 23 m²



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new function

archipelago network spot / national park office. warehouse.

details

the structure offers information about the archipelago to the visitors but is also an organization and coordination center for the whole network. it is dislocated because, due to further development, could gain a stategic position. a photovoltaic system has been integrated in the roof.





• preavious function n.a.

• dimensions

surface: 137 m² + 98 m² + 24 m² volumetry: 1.380 m³

• more

most of the coverages are intact. entrances and widows with frames. some entrances have been walled up.



scale 1:500







"mooring structure" / shared kitchen

new functions

weatherstation / energy warehouse. "mooring structure" / shared kitchen. research laboratories.

details

the laboratories researches focus on water pollution and marine environment supervisioning the sea quality of the archipelago. the laboratory has a photovoltaic system integrated in the roof.



ground floor reserach laboratory

1st floor reserach laboratory









location: **Ia maddalena** coordinates: **41°13,46'N - 9°22,36'E**

the settlement of cala francese is a didactic and research pole which delve into wind potential and sail technologies development. it offers support services to mariners, visitors and tourists and can host small seminars, workshops and courses on site offering suitable spaces and structures.















- preavious functions n.a.
- dimensions surface: 385 m² volumetry: 1.540 m³
- more

the western part of the coverage has collapsed. part of the practicable entrances and widows with obstructions . some windows on the western and eastern facade have been walled up.



scale 1:500

44%



new function

classroom / laboratories.

details

the laboratories researches focus on the wind and the potential of eolic energy production systems usable in the archipelago. moreover the worshop spaces offer the opportunity to develop local craftmanship related to the wind such as sail technology.







- preavious functions n.a.
- dimensions surface: 68 m² volumetry: 248 m³
- more

the western part of the coverage is damaged. practicable entrances and widows have been provided with frames. some of the windows on the western and eastern side have been walled up.









• **new function** shared kitchen

details

the common kitchen leads to an easier management compared to a canteen and offers a gathering space that works for internal and external users. it has a private toilet.







- preavious functions n.a.
- dimensions surface: 47 m² + 20 m² + 12 m² volumetry: 249 m³
- more

the three building have been occupied and restored to different functions.









• new functions restroom.

weatherstation. energy warehouse.

• details

the restroom is a service to internal and external users. the weather station and energy warehouse are management tools and technical spaces.





- preavious functions n.a.
- dimensions surface: 264 m² + 39 m² volumetry: 1.177m³

• more

the southern structure has been partially modified due to advanced deterioration and the coverage is made out of wood plates. the northern building has an intact coverage and structure. only the external patio has an high decay level.



scale 1:500





• new functions

library / archipelago network spot / national park office. "mooring structure".

• details

a library, managed by the municipal library, offers to the inside and outside users a research and study area. the archipelago network and national park office offer information about the archipelago and are also an organization and coordination center for the whole network.



library / archipelago network spot / national park office

















CALA CORSARA

location: **spargi** coordinates: **41°13,49'N - 9°20,45'E**

the settlement of cala corsara is a didactic and research pole which delve into sun potential and energy production technologies. it offers support services to mariners and can host small seminars, workshops and courses on site offering suitable spaces and structures.











- preavious functions n.a.
- dimensions surface: 43 m² + 43 m² volumetry: 276 m³
- more

the buildings have been recently restored. the practicable entrances and windows have frames. the western building is empty and the eastern one has two unusable bathroom.





structure coverage:

integrated photovoltaic system with 7 kWp and a potential productivity of 9.480 kWh/year. 56 m²

structure coverage:

integrated photovoltaic system with 7 kWp and a potential productivity of 9.480 kWh/year. 56 m²

"mooring structure": emergency shelter for

inside and outside users which can host max. 4 people for a short period. it has a toilet and a small kitchen. 32 m²

archipelago network spot / national park office: workspace for the

coordination of the network and organization of the services offered by the archipelago and the national park. 30 m²

new functions

archipelago network spot / national park office. "mooring structure".

details

the structure offers information about the archipelago to the visitors but is also an organization and coordination center for the whole network. the "mooring structure" offers a service to internal and external users. archipelago network spot / national park office





"mooring structure"





- preavious functions n.a.
- dimensions surface: 402 m² + 15 m² volumetry: 1.726 m³
- more

the buildings have been recently restored. all the practicable entrances have frames and iron gratings. some of the windows on the eastern and western side have been walled up.





new functions

classroom / laboratories / shared kitchen. energy warehouse.

details

the isolation of the settlement impose the application of photovoltaic systems despite the integrity of the coverage wich has however a favorable orientation. the laboratories researches focus on solar energy and the potential of sustainable energy production systems usable in the archipelago.





classroom / laboratories / shared kitchen



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CALA MURO

location: la presa coordinates: 41°18,32'N - 9°22,27'E

the settlement of cala muro is a surveillance and reference point for the northern gate of the archipelago. it has mainly a lookout function but represent the first step for the reactivation of the two lighthouses structure which will offer wider spaces for the network development. it offers emergency support to mariners.





temporary pier

the mooring of santa maria has a considerable distance from vedetta presa and moreover cala muro is an MA zone (with berth prohibition). vedetta presa is located in the northest part of the archipelago and has therefore a strategic role. the temporary pier guarantees an easier accessibility to the structure which will start the reactivation process of the two lighthouses located on santa maria and razzoli representing an important future resource. once the other structures entered the system the pier will be removed and the vedetta willchange its destination focusing on other speciefic activities.

cistern

SHK



forward observation station surface: 76 m²

scale 1:1000

A CONTRACT







- **preavious function** forward observation station.
- dimensions surface: 76 m² volumetry: 308 m³
- more

intact coverage. practicable entrances and widows without obstructions. downfall of the enclosure wall and external cistern coverage.



scale 1:500

100%

m²



common kitchen:

the kitchen is independent and usable from all the users. 8 m^2

"cabin" / "mooring structure": emergency shelter for inside and

emergency shelter for inside and outside users which can host max. 4 people for a short period. it has a toilet. 17 m²

water cistern:

the collected water is filtered and brought to the structure with a pump in order to guarantee running water.



integrated photovoltaic system with 12 kWp and a potential productivity of 26.800 kWh/year. 100 m²

microeolic turbine:

8 triple blades WT 1 kW. expected performance for wind 6 m/s: 7.680 kWh/year. cut in wind speed: of 3 m/s. dimensions: 1,45 m high and 1,45 m wide.

archipelago network spot:

provides all the informations about the archipelago and its network. 10 m²

national park lookout:

it is the control element of the area in therms od security and environment. 25 m²



water cistern

new functions

archipelago network spot / national park lookout / "mooring structure".

details

• the reference point provides all the practical information about the archipelago. it offers the opportunity to stay over night if needed. microeolic and photovoltaic system guarantee, with the water cistern, the structure self-sufficiency.





in november...





*low season scenario

interaction point

relation element: didactic / research activity

used coastline

iffused housing settlement

1

in august...

*scenery





*high season scenario



relation element: receptive activity

used coastlin

diffused housing settlement

used seashore

variable...





*one year scenario





administrative process...



Administration Tool

A foundation is a legal categorization of nonprofit organizations. This type of nonprofit organization may either donate funds and support to other organizations, or provide the sole source of funding for their own activities.

The term "foundation," in general, is used to describe a distinct legal entity set up for collective purposes.

In Italy, a foundation is a private non profit and autonomous organisation, its assets must be dedicated to a purpose established by the founder. The founder cannot receive any benefits from the foundation or have reverted the initial assets. The private foundations or civil code foundations are under the section about non commercial entities of the first book (Libro Primo) of the Civil Code of Law (Codice Civile) from 1942. The Art. 16 CC establishes that the statutes of the foundation must contain its name, purpose, assets, domicile, administrative organs and regulations, and how the grants will be distributed. The founder must write a declaration of intention including a purpose and endow assets for such purpose. This document can be in the form of a notarised deed or a will. To obtain legal personality, the foundation must enroll in the legal register of each Prefettura (local authority) or some cases the regional authority. There are several nuances in requirements according to each foundation's purpose and area of activity.

Archipelago Network Foundation

The foundation will receive all the ex military structures present in the archipelago as a donation from the owner's authorities or corporations.

The aim of the foundation consists on the implementation of the archipelago-system, promoting initiatives and activities in order to fallow a sustainable development model.

The foundation will be responsible for the restoration and maintenace of the assets, for the management of the whole network, for the promotion of the archipelago and for the hedge funds. Moreover it will shape and seal the projects and planning which will be carried out for the structures in hand.

The management process will be conceived with the local authorities, assets and inhabitants, in order to guarantee, the commitment of the single structures to local realities and therefore an economic and cultural expansion.

The grouping of all this tasks under a single coordination institution enable a series of political, burocratic and andministrative simplifications which go for a more efficient governmental instrument.



origin

government property region property province property municipality property military property



organization

coordinating network financing projects restorating proexistence promoting initiatives maintaining environment integrating renewed scenarios designing mutable edges reclaiming territories



destination

- create work opportunities enhance local community rediscover traditional assets
- expedite productive regimes design mutable edges fortify local identy initialize sustainable model

energetic process...

The Third Industrial Revolution

"We are on the cusp of a Third Industrial Revolution that could give us a door open to a new post-fossil fuel era. It was the first Industrial Revolution that brought together print and literacy with coal steam and rail. The second combined the telegraph and telephone with the internal combustion engine and oil. What we have now is the possibility of a distributed energy revolution. We can all create our own energy, store it, and then distribute it to each other. Twenty five years from now millions of buildings will become power plants that will load renewable energy. We will load solar power from the sun, wind from turbines and even ocean waves on each coast. We can also make the power grid of the world smart and intelligent; we call it inter-grid. Not far from now, millions and millions of people will load power to buildings, store it in the form of hydrogen and distribute energy peer-to-peer; just like digital media and the internet. The "Third Industrial Revolution" is an economic game plan. We have the science and technology to do it, but it will mean nothing unless there is a change in will."

* Jeremy Rifkin



working just with available datas of photovolaic and microeolic without taking in consideration other applyable technologies.

*infos summary



≈ 2.230.000 m²

militarized buildings surface



≈ 67.440 m²

reclaimed ground surface



reclaimed buildings surface



≈ 270.000 m²

(12% of the whole militarized ground)

≈ 6.440 m²
(10% of the whole militarized buildings)

eolic installed surface



≈ 2.444 m²
(1% of the reclaimed ground)

photovoltaic installed surface



≈ 4.816 m²
(74% of the reclaimed buildings)



(20% of whole the producted energy)

(80% of whole the producted energy)

*energy production

1.009.890 kWh/year 2.766 kWh/day 2.766.821 Wh/day

685 ** (x + y) = (y) =








*energy production



average annual consumption 4 people family unit:

3.000 kWh



la maddalena inhabitants:

11.668

number of families:

5.700

average family unit:



average annual consumption la maddalena average family:

1.500 kWh



average number of sustainable family units:

673



wait a moment...

*imagine





ENERGY STATIONS WILL GENERATE

- workplaces due to maintenance and managing of the whole network.
- money saving for the entire municipality due to the energy production and self consumption.
- necessity of research structures and investigation laboratories which will increase the yearly inhabitants number and the local cash flow.
- necessity of representative structures for exhibitions and institutional events.
- ✤ increase of eco-tourism.
- reuse of the abandoned milatary structures, which means the restoration, reclamation and the reactivation of decayed sites.
- booster to the unmilitarization process of the arcipelago.
- the ransom of a war and dependance element to a independance and sustainable symbol.
- * european, national and regional funding.
- lasting activity with stable incomes during the whole year and not just condensed in the summer period.



≈ 2.230.000 m²

≈ 67.440 m²

eolic installable surface



≈ 21.600 m² (1% of the reclaimable ground)

photovoltaic installable surface



≈ 49.900 m²
(74% of the reclaimable buildings)

eolic *productable* energy



≈ 2.162.500 kWh/year

(20% of whole the producted energy)

photovoltaic productable energy



≈ 9.981.000 kWh/year

(80% of whole the producted energy)

*imagine



it would cover the 142% of the archipelago families demand.



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