Activate resilience of the Miyagi coast is the reintegration of a regional vision that improves local collaboration between municipalities after a tsunami hit the east coast of Japan in 2011. After analysis, the strategy is based on three infrastructures that have a continuous presence throughout the region. This network creates a superimposition of contexts where multiple strategies and disperse beyond district borders or pinpoint a single location. The strategies are applied on different scales and translated into a range of urban designs that improve the region on themes such as economy, environment, safety and quality of life.

This supportive role of regional design gives handles to a complex problem with the consideration of a wider scope of interdependencies making a region more resilient as a whole for when the next big one strikes.

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Mentor: F.L. Hooimeijer & F. van de Ven
Studio: Delta Interventions

LEGEND
- Techo powergrid
- Maximum flood area
- Visual energy exposition line
- Wave energy
- Dune energy
- Coastal forest energy
- Coastal forest
- Delta
- Transport network
- Road
- Hately castle
- Cultural site
- Tourism port
- Forest area
- National park
- Flood
- Transport tissue (100)

A - GREEN AND BLUE INFRASTRUCTURE / ECO JETTY
- Crassostrea gigasi - Japanese oyster
- Zosteraceae - Seagrass
- Berberis thunbergii - Japanese barberry
- Echinochloa frumentacea - Japanese Millet
- Typha - Cattail
- Castanopsis sieboldii - Japanese Beech
- Machilus J. - Laurel
- Pinus densiflora - Japanese Red Pine
- Flexibile and vertical rooting Aqua Garden

B - TRANSPORT INFRASTRUCTURE / TRANSIT ORIENTED DEVELOPMENT
- Dock
- Oyster Creeks

C - ENERGY INFRASTRUCTURE / ENERGY HARBOUR
- Bio energy
- Geothermal
- Biowaste
- Solar panels industrial
- Solar panels residential
- Solar zone
- P+R, charging
- Powerstation
- Expansion system
- Currents energy system
- Electricity generator
- Biowaste plant
- Geothermal plant
- Solar panels

This area is one of the tsunami prone locations where the implementation of secondary dyke structures is missing. It is a partially protected area for height of the levees flooding the river with the increase of deforestation of the adjacent coastal neighborhoods from the river side. Complicating factor is the river that floods the neighborhood due to its impervious urbanisation. To ensure the safety of the community a new area is shaped only a maximum buffer capacity of 45 m0 22,57,5 m is added around the current neighborhoods. This area is ideal to redevelop due to its arterial infrastructure that surrounds the neighborhood. Densifying strategy is to extend the development of residential and industrial blocks. A tertiary branch could be introduced to maximize the buildable area. The strategies are applied on different scales and dispersed beyond district borders or pinpoint a single location. This network creates a superimposition of contexts where multiple strategies and disperse beyond district borders or pinpoint a single location.

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