

# CREATE

## Adriatic Adaptation Award

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## 1. Introduction

This document describes the procedure followed for the assignment of the Adriatic Adaptation Award, which was endowed by the CREATE project to showcase existing local adaptation initiatives provide an opportunity for mutual learning and for showcasing successful experiences to local authorities and the wider public.

## 2. Endowment Procedure

### 2.1. Preparation

The first announcement of the Adriatic Adaptation award was made during the project kick-off meeting, and after preparation work, including the definition of eligibility and award criteria the official call for the submission was made on the 1<sup>st</sup> of February and remained open until the 10<sup>th</sup> of March, and disseminated on all CREATE channels. Applications were collected with a specific and detailed on-line form (see annex 1) which had been translated in Italian and Croatian so to reduce eventual language barriers. The detailed application form aimed at ensuring that relevance of proposed action with respect to climate impacts was made evident and that financial aspects, expected positive and negative side effect could be mentioned.

### 2.2. Submissions

By the 10<sup>th</sup> of March, 13 proposals had been submitted of these 8 from Croatia and 5 from Italian institutions. Among these, three were excluded from the assessment after having recontacted the proponents as they did not fully correspond to the eligibility criteria, either because still in the phase of planning, as in the case of de-paving of a schoolyard in Civitanova, Italy, or because not directly addressing impacts from climate change as in the case of an educational project of the PAK association and the initiatives for sustainable transformation of the coastal zone of Podstrana, both in Croatia (see Annex 2 for a synthetic description of the proposals).

### 2.3. Evaluation

The ten remaining proposals have been submitted to the group of 5 Jury members which agreed to support the assessment process. evaluation of the complete proposals and eventual additional information provided by the proponents. The scoring was based on a scheme developed by the CREATE team with the aim of guaranteeing a fair acknowledgement of very different thematic proposals and evaluated the quality of the proposals with regards to all phases of a project implementation cycle, paying particular attention to aspects of participation and monitoring. Assessments were made in 4 groups of Criteria, assessing the scope and rationale of the adaptation action, the governance mechanisms set in place for implementation and management, efficiency and effectiveness of solutions chosen, side effects and co-benefits created and replicability and upscaling potential of the solution (see annex 4 for the assessment scheme). Jury members met in a virtual team to discuss their individual assessments and agreed on the selection of the four best proposals and, among these, the winning proposal:

- Realization of dry walls as part of the management of an agricultural enterprise in Lovran (HR)
- Realization of the Parco del Mare in Rimini (IT)
- Strategy of the Integrated Management for Protection and Adaptation of the Coast to climate change; Emilia Romagna Region (IT)
- Rain gardens and other NBS systems to reduce pluvial floods(Pula-Pola (HR) (winning proposal)

#### 2.4. Adriatic Adaptation Award ceremony

The Adriatic Adaptation Award ceremony took place during the final conference and the proponents of the 4 winning proposals were invited to present their projects during the conference. The Jury was represented, during the conference, by Francesca Giordano from the Italian Environment Agency (ISPRA) selected four particularly interesting examples from the 13 projects submitted. Representatives of the winning projects presented their activity during the conference. (see videos with short statements by the four winners on YouTube <https://ytube.io/3i9j>)

It was mentioned that the selection of best practices among the project submitted was a hard task due to the very different and very interesting implementations, and that also some of the proposals not retained eligible because either still in the planning phase or not directly focused on adaptation to climate impact, yet very important for a more sustainable development of the Adriatic region.

Mr. Zaccaria, from the municipality of Lovran in Croatia has worked in collaboration with an NGO and a private farmer promoting the reintroduction of **dry walls** as a means for protection against land slides and wildfires and for the protection of the traditional landscape. As Ms Giordano explained, the Jury appreciated in particular the engagement for recovering traditional agricultural techniques which have the capacity, among others, of preventing land-slides and reducing fire risk

and support biodiversity. This example has been considered having a high potential to be a role model for the maintenance of the landscape and agriculture in many parts of the Adriatic area.

Mr. Montanari from the Emilia Romagna region presented the new **regional strategy for the Integrated Management for Protection and Adaptation of the Coast to climate change (GIDAC)** and in particular the participated procedure of this policy document for the Emilia-Romagna coastal area, which aims to reduce the vulnerability of the coastal territory and the exposure to risk of natural and anthropic elements, in relation to the danger and related impacts on the territory of current and expected meteo-marine phenomena due to climate change (erosion, SLR, storm surges, river/costal floodings, salinization of the groundwater). As Ms Giordano referred, the Jury appreciated in this proposal in particular the ambitious integrated and holistic approach to climate change adaptation based on ecosystem-based adaptation, the coherence with ICZM methodology for the Mediterranean region and the participative approach implemented involving in particular young people and establishing an inter-generational dialogue.

Ms Silvia Capelli from the City of Rimini presented the realization of the **Parco del Mare** which is transforming the City's 16 km of coastline in depth. The transformation of the area between beaches and urbanized areas aims providing protection for the city against marine intrusion and is combined with renovation of the sewage system which prevents sewage overflows and out spills of sewage into the sea. The heavy transformation has been combined with an attractive design which creates new attractive spaces for outdoor actives, walking, cycling, sports and playgrounds. The Jury appreciated the courageous transformation of the seafront area into a green space which aims at protecting the urban area from flooding from the sea while creating a highly attractive urban space.

Finally Ms Anja Ademi from the Municipality of Pula described the city's **new concept of storm water drainage using Nature Based Solutions** which is focused, since several years, on retaining rainwater and purified as much as possible of this water at the place where it originates in the city. The aim was to drastically reduce the amount of rainwater entering the sewage system by retaining it on green areas (free water level on green areas and/or underground retention) and, after purification, further infiltrating the terrain. This was achieved in a cooperation across different departments of the municipality. The Jury registered positively not only the number of sites already transformed with nature-based solutions to adapt the city for more intense precipitation and increased run off, but also the extent of cross-sector collaboration within your administration which made this transformation possible.

This concept and its consequent application was awarded as the best project among those submitted and awarded with the first price of the Adriatic Adaptation Award.

## Annex 1 Application form

Transcription of the application form proposed in three languages (EN, IT and HR)



ADRIATIC  
ADAPTATION  
AWARD

# A3 Adriatic Adaptation Award

Form for submission of proposals

Nominate your Adaptation Initiative for the A3 Adriatic Adaptation Award

*Your application will be reviewed by a panel of experts*

E-mail us to [name.surname@org.nn](mailto:name.surname@org.nn) if you're experiencing any technical difficulties.

### **Applicant information**

Organization

Contact person\* \*

E-mail\* \*

Phone number\* \*

Address

### **General Information about the adaptation initiative**

Name

Category of action (option 1: type of solution) \*

*Please choose the type of solution which is most appropriate.*

- Nature based solution
- Governance solution
- Technical solutions
- Mixed solution
- All of the above

Location \*

Implementation Period \*

Owner \*

Contractor \*

Investor or source of finance \*

Website

**Climate impacts addressed:**

*What climate risks does the initiative address (please choose all pertinent impacts)*

- *drought,*
- *heat waves*
- *surface floods/torrential rains*
- *river/coastal floods*
- *storm surges,*
- *strong winds*
- *salinization of ground water.*

**Description of the initiative**

**Introduction \***

*An interesting summary of the project description of 5-10 sentences. (Briefly explain the what it is about, making it an interesting, engaging and exciting read.)*

.....

**Climate risks and impacts addressed: \* \***



*Which climate risks does the initiative address, what is the specific objective of the adaptation initiative and why was it implemented? The text can also include an answer to the question why the owner chose this particular aim and mention also triggering or enabling events, or moments when it became clear that action is necessary and feasible. .*

.....

### **Initial State \***

Describe the state of the area before the works started, which impacts have already occurred or you anticipate would occur in the future, which problems do these impacts create for residents or for other users of the area?

### **How does it work?\***

Include a detailed description of the initiative and its current state. Describe the area of the project, the single solutions used, describe their extent/size, how they work and the background of their origin. Do not avoid numbers (for example, include how many cubic meters of sand were taken during beach replenishment, how many square meters of roof were planted with greenery, how many trees have been planted, etc.). Using technical terminology is fine, but please explain it. Laymen should be able to imagine what was created in the project and how.

### **Side Effects**

Does initiative have other positive effects beyond those related to climate impacts (environmental, economic, improvements, increase of quality of life) and who benefited most?

### **Operation and Maintenance**

What does the future maintenance look like and, if applicable, what are the additional operating costs? Please also provide a gross budget for operating costs, if possible. Who is responsible for operation and maintenance?

### **Alternative Options**

Did you consider alternative options? If so, why did you choose the initiative implemented?

### **Challenges and Obstacles**

What were the biggest challenges and obstacles? What was the biggest problem during the implementation of the measure you had to solve?

### **Experience and unexpected outcomes**

Share your implementation experience with us. In particular, what was not taken into account before you started implementing the initiative?

### **Monitoring**

Do you monitor the implementation and functioning of the initiative? How do you measure?

### **Finance**

Describe the financing of the project - total cost, resources, expected return on the investment, expected lifespan, savings compared to the situation without the implemented adaptation solutions. Mention the source of finance.

Add 3 photos here

If possible, please provide us with links to photos here.

Add links to video (if available)

## Annex 2 List of submitted proposals

| Name of project   | Organization                              | Type of solution       | Area of intervention |       |                        | State of the initiative | Implementation Period              | Climate risks addressed  | Eligible                    |
|---|---|------------------------|----------------------|-------|------------------------|-------------------------|------------------------------------|--|-----------------------------|
|   |   |                        | coastal              | Urban | agriculture / environ. |                         |                                    |  |                             |
| Education of children and young people along the coast of Croatia about the need to preserve the Adriatic Sea and adapt to climate change | Society for Ecological Research Paks (HR) | Nature based Solutions |                      |       | x                      | on-going                | since 2001                         | Sea level rise, climate change in the sea, arrival of invasive species | No (no adaptation measures) |
| Ecologically sustainable development of the coastal area of the Municipality of Podstrana   | Municipality of Podstrana (HR)            | Hybrid solution        | x                    |       |                        | on going                | Since 2017                         | reduction of CO2 emissions   | No (no adaptation measures) |
| Construction of the Donje Polje - Jadrtovac Public Irrigation System  | Šibenik-Knin County (HR)                  | Technical solution     |                      |       | x                      | on going                | 2021<br>2024                       | drought  | yes                         |
| Etnološki park "Anton Plašimuha"  | Brsečki Česan Association (HR)            | Nature based Solution  |                      |       | x                      | on going                | 2018                               | prevention of soil erosion and landslides, fire prevention             | yes                         |
| Management plan for the marine environment and coastal area of the Split-Dalmatia County  | Split-Dalmatia County (HR)                | Governance Solution    | x                    |       |                        | concluded               | 29.04. 2019. - 29.06. 2020. godine | sea floods, flash floods from rainwater, occurrence                    | yes                         |

| Name of project  | Organization                                    | Type of solution       | Area of intervention |       |                        | State of the initiative | Implementation Period                   | Climate risks addressed  | Eligible             |
|--|---|------------------------|----------------------|-------|------------------------|-------------------------|---|--|----------------------|
|  |   |                        | coastal              | Urban | agriculture / environ. |                         |   |  |                      |
| (Coastal Plan SDŽ)   |   |                        |                      |       |                        |                         |   | nce of heat islands, increased risk of fire, beach erosion             |                      |
| Encouraging the development of heating and cooling technologies based on heat pumps using seawater in the Adriatic-Ionian region | Development Agency Dubrovnik – DURA (HR)        | Technical solution     |                      | X     |                        | concluded               | Projekt SEAD RION 2018.-.2021.          | Transition to renewable energy sources, reducing the climate footprint | yes                  |
| PMO Gate   | Città Kaštela (HR)                              | Technical solution     |                      | X     |                        | concluded               | 01/2019 - 06/2022                       | Storm surges   | yes                  |
| Rain gardens and other NBS systems to reduce pluvial floods  | Città Pula-Pola (HR)                            | Nature based Solutions |                      | X     |                        | on-going                | Implemented since 2011, date of the GUP | Surface flooding   | yes                  |
| Civitanova depaving project  | Leonardo Da Vinci Institute of Higher Education | Nature based Solution  |                      | X     |                        | Planning is on-going    | 2024/2025                               | Heat waves and surface flooding  | No (not implemented) |
| Refurbishment of the Premi Nobel Square  | Municipality of Cervia                          | Hybrid solution        |                      | X     |                        | on-going                | 2022-2023                               | Heat waves and surface flooding  | yes                  |
| Progetto LIFE VIMINE, integrated   | Municipality of Venezia                         | Hybrid solution        |                      |       | X                      | concluded               | 2013-2017                               | Impacts from tidal   | yes                  |

| Name of project   | Organization           | Type of solution      | Area of intervention |       |                        | State of the initiative | Implementation Period | Climate risks addressed                      | Eligible |
|---|------------------------|-----------------------|----------------------|-------|------------------------|-------------------------|-----------------------|--|----------|
|   |                        |                       | coastal              | Urban | agriculture / environ. |                         |                       |  |          |
| approach to the sustainable conservation of mudflats in the Lagoon of Venice  |                        |                       |                      |       |                        |                         |                       | events, sea level rise, erosion of mud flats |          |
| Realization of the sea promenade Parco del mare: urban regeneration, mitigation of impacts from marine ingression and refurbishment of the coastal zone | Comune di Rimini       | Nature based Solution | X                    | X     |                        | First lot concluded     | 2019 - 2022           | Marine ingression and heat waves             | yes      |
| Strategy of the Integrated Management for Protection and Adaptation of the Coast to climate change (GIDAC)  | Regione Emilia-Romagna | Mixed solution        | X                    |       |                        | on-going                | June 2020             | storm surges                                 | yes      |

### Annex 3 List of Jury members

| Name                     | Funtion  | Country |
|--------------------------|--|---------|
| Brian Shipman            | Consultant to PAP RAC for Coastal management                                   | UK      |
| Francesca Giordano       | Italian Environment Agency (ISPRA)   | IT      |
| Giovanni Fini            | Director of the Environment Department Municipality of Cesena (IT)             | IT      |
| Martina Baučić           | Faculty of Geodesy, Architecture and Civil Engineering Split (HR)              | HR      |
| Doc. dr. sc. Maja Krželj | Head of Department of Marine Studies - University of Split University of Split | HR      |

## Annex 5 Assessment Framework

| Macro-criteria                                      | Specific criteria  | Notes   | Rating*      |
|---|--|---|--------------|
| <b>Scope and rationale of the adaptation action</b> | Quality and relevance of design and implementation methods                     | Design and implementation methods are well planned: no (0), excellent (5)   | <b>0 - 5</b> |
|   | Quality and relevance of the monitoring and evaluation                         | Monitoring and evaluation not foreseen (0) thoroughly planned (5)   | <b>0 - 5</b> |
|   | Early preparatory action   | Early preparatory action to avoid future damage costs (5) VS reacting on foregone impacts (0 or 3)  | <b>0 - 5</b> |
| <b>Governance</b>                                   | Level of stakeholders involvement  | Stakeholder participated in decision making and design of measures (3-5)  | <b>0 - 5</b> |
|   | Efficient governance solution  | Solutions for ensuring governance of planning and implementation involve different actors in a structured and convincing way (5)  | <b>0 - 5</b> |
| <b>Efficiency and effectiveness</b>                 | Flexibility for adjustments or reversibility in case of diverging developments | The project is designed in a way which allows for future adjustments (efficiency is monitored, plans for reviewing efficiency and side effects are foreseen and credible) | <b>0 - 5</b> |

| Macro-criteria                                | Specific criteria   | Notes   | Rating* |
|---|---|---|---------|
|   | Efficiency/consistency in delivering adaptation                               | The measure is designed and implemented so as to effectively adapt to climate risks (5), or has positive externalities that contribute to climate change adaptation (3) | 0 - 5   |
|   | Viability limit (long-term vs short term)                                     | Under future climate, does the project have a viability threshold (e.g. range of sea level rise, decline in precipitation, etc. ?)                                      | 0 - 5   |
| <b>Side effects and co-benefits generated</b> | Addressing multiple climate risks   | Does the proposal address more than one risk (climate impact)   | 0 - 5   |
|   | Generating positive side-effects (socio-economic, environment, climatic, ...) | Does the project produce positive side effects (no, some, many)   | 0 - 5   |
| <b>Replicability and upscaling</b>            | Replicability potential in different locations                                | Can the project be replicated across the adriatic area (no, with some difficulties, easily)   | 0 - 5   |
|   | Upscaling potential for a wider adoption                                      | Can the project become a solution which is applied as a standard solution across the adriatic area (no, with some difficulties, easily)                                 | 0 - 5   |

\* Ratings:

- 5 points      the project provides positive responses to the question
- 4 points      the project provides positive responses, yet some problems are seen



- 3 points      the project provides positive responses, but there are also relevant gaps/negative points seen
- 2 points      the positive responses are limited, and concerns about potential gaps/negative effects (e.g. long-term perspectives) are seen
- 1 point        the project does provide some responses, but relevant concerns are prevailing

## Annex 6 Photos Award Ceremony



*Roberto Montanari, Emilia Romagna Region @Giorgi 2023*



*Silvia Capelli, Municipality of Rimini @Giorgi 2023*



*Mario Zaccaria, Lovran (HR) © Giorgi 2023*



*Anja Ademi, Municipality of Pula – Pola © Giorgi 2023 1*