





Circular Economy Action Plan in coastal and island regions: challenges and opportunities 01.April.2022





Circular economy Action Plan Tulcea Country

- Recycle paper and cardboard locally and obtain other products
- Reuse and recycle old fishing gear (nets, hooks, etc.) and aquaculture equipment
- Using local resources to make reed products
- Research into the possibilities for setting up a recycling and repair business for boats





- The EU Eco-label and ecological criteria, viable tools to implement a sustainable
 - consumption and production
- Principles of product life-cycle: "sustainable supplies, eco-design, responsible
 - consumption, lifespan lengthening, and recycling"
- Developing a green and circular economy
- Circular use of soils







- Implement the principle ,, pay as you throw"
- Support for meetings and workshops for stakeholders to enhance circular economy partnerships
- > Development of marketing materials that would raise public awareness
- Research into the possibilities of setting up a station to transform locally produced biodegradable waste but also cellulose waste into compost
- Research into the possibilities of obtaining energy from household waste/cellulosic waste/etc
- Workshops on plastic/glass waste's reuse versatility
- Small business enterprises for plastic recycling: chopping to obtain flakes/wool/yarn
- Reuse the glass or process it to obtain pieces of different sizes/glass sand for ship blasting/backfill material





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ENERGY ACTION PLAN

Main drivers/key objectives and target actions: ensuring energy security, increasing the resilience of the energy system, and facilitating energy transition by clean and renewable energy production, adoption of new energy-efficient technologies, sustainable alternative (bio)fuels production and use, development of a charging and refuelling interconnected network/infrastructure etc.

- Reduction of greenhouse gas emissions
- Reduction of operational and embedded carbon (ex. decarbonisation of architecture) / Decarbonization of economy
- Decarbonization of gases
- Protect the ecosystem and support preserving bio-diversity/possitive effects for biodiversity
- Reduce energy costs
- Reduce the overall consumption of energy (green mobility, home insulation)
- Alleviate energy poverty
- Increase quality of life

> Increase efficiency of existing wind turbines by proposing new, more efficient

- design solutions
 - More green energy
 - Less impact on the ecosystem
- > Develop integrated energy production systems capable of handling natural
- fluctuations in renewable energy production
 - Convert electrical power to (power-to-X) and from (X-to-power) storable
 - forms of energy (e.g. Hydrogen)





- > Promote small scale, modular electricity production systems suited for real
- Danube Delta conditions
 - Suitable for small, isolated communities or individual households
 - Less intrusive into the protected Danube Delta ecosystem
 - Mobile, but capable to be easily integrated into larger scale units
- Increasing the production and consumption of energy from renewable sources, Diversification of renewable energy production sources, Ensuring the sustainability of bioenergy
 - Wind (most common in the present)
 - Solar, Biomass, Hydrogen (green or blue)
 - Bioenergy and advanced (bio)fuels (biobutanol, biomethanol, biohydrogen, hydrotreated vegetable oils/renewable diesel (HVO/HEFA), biogas/biomethane, cellulosic ethanol), ammonia and (bio)synthetic fuels - from biomass, agricultural residues, agro-industrial (organic) wastes, lignocellulosic materials, novel and sustainable energy crops, microalgae/plant tissues cultures
- Innovative energy storage solutions



Biodiversity ACTION PLAN



Strategic directions

Species and habitats conservation, ecosystems management and/or restoration interventions can deliver measurable climate adaptation and mitigation outcomes that have human development and biodiversity co-benefits.

- 1. Maintain and enhance species and habitats conservation status and Danube Delta's natural processes (to ensure ecosystems resilience and deliver functional ecosystem services)
 - a. Maintain priority species and habitats in a favourable conservation status
 - b. Ensure connectivity and ecological coherence at the Danube Delta scale
 - c. Creation of ex situ facilities for the conservation of endangered fish species (e.g. sturgeons)
 - d. Preventing eutrophication of water bodies
- 2. Sustainable management of natural resources nature-based solutions for sustaining the local economy
 - a. Sustainable use of reed biomass
 - b. Climate resilient forest management
 - c. Invasive species management
 - d. Conservation and sustainable use of soil biodiversity





. Prioritise ecosystems restoration to increase climate resilience, decarbonisation and provide natural resources to local communities

- a. Wetland restoration programme
- Restoration of the lagoons' communication system (including the Razim Sinoe complex) with the Black Sea
- c. Forest restoration programme
- 4. Enabling conditions for biodiversity conservation and ecosystems restoration
 - a. Financial policies / mechanisms aiming to balance inequality in supporting economic activities adapted to Delta conditions and to support the protection and restoration of ecosystems (PNRR, PODD).
 - b. Governance system allowing management decisions to be substantiated by scientific arguments and expert opinions as well as effective consultation and involvement of stakeholders (especially local communities).



GREEN & SMART MOBILITY TULCEA COUNTRY

- Strategies and mobility plans bottom up approach
- Green Ports transition to green ports (decarbonisation, natural and anthropic systems materials, functionalities, structures etc.), integration in the natural environment
- Micro-mobility active mobility bikes & boats multi hops mobility based on small boats and small vehicles (electric and autonomic)
- Shared Mobility digital platform
- Smart, Low Carbon & Integrated Mobility regional and European mobility / transport systems
- Digitalisation digital mobility and integration with smart village and communities
- Mobility as a service (biodiversity restoration) integration with other services
- Exhaustive mobility (humans, species, nature based solutions)
- Promote decarbonisation and reduce the emissions of air pollutants from transport
- Improving the environmental performance of ships and ports

MODERNIZATION OF TULCEA PORT







- Overall objective: Modernization and development of port infrastructure serving cargo and passenger ship traffic, according to the current and projected volume of demand, in order to increase the efficiency and safety of port operations.
- Specific objectives:
- 1. reduction of the time required for the maneuvers of berthing of cargo and passenger ships in the Port of Tulcea;
- 2. increasing the safety of inland waterway transport of goods and passengers; modernization of the quay on a length of 1,510 m;
- S. modernization of the access road with a length of 100 m and creation of new port infrastructure with a total area of 36,016.70 sqm

- TARGET GROUP
- 1) The population of Tulcea County and, especially, the population of the localities from the Danube Delta accessible only by water;
- 2) Tourists and visitors of the Danube Delta;
- 3) Naval transport operators;
- 4) Economic operators from Tulcea county.
- expected results
- Adequate conditions for berthing and loading / unloading of cargo ships (approx. 4,200 tons / year in 2025) and respectively reducing the time by an average of 4 hours / cargo ship
- Adequate conditions for the safe berthing of passenger ships and the reduction of embarkation / disembarkation times (savings of 0.5 hours / local passenger ship and 3 hours / cruise ship).
- **PROJECT FUNDING:**
- Total value: 190,162,236.67 lei
- > Total eligible value: 159,969,733.00 lei
- Non-reimbursable eligible amount from the ERDF: 135,974,273.05 lei
- Eligible non-reimbursable value from the state budget: 20,796,065.29 lei
- Eligible co-financing value from the budget of the Tulcea County Council: 3,199,394.66 lei
- > Ineligible value, including VAT: 30,192,503.67 lei







Thank you for your attention!

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