

CIRASIM Project: *Co-funded by the European Union and ADRION*

Project Title: CIRASIM - Cold Ironing Assessment Implementation Model

PROGRAM: INTERREG IPA ADRION

Project Overview:

According to the International Maritime Organization (IMO), the maritime industry emits around 940 million tons of CO₂ annually, constituting approximately 2.5% of global CO₂ emissions. While most emissions occur from ships in motion at sea, rivers, and lakes, some also arise from ships docked or anchored at ports.

Currently, "Cold Ironing" refers to the process of supplying electrical power to docked ships while their main and auxiliary engines are switched off. The primary objective of the CIRASIM project is to enable a deeper analysis of the opportunities and challenges for implementing Cold Ironing by examining the specific characteristics of each partner port participating in the project—Ploče, Ancona, Durrës, Volos, and Belgrade. These ports are defined by unique factors, including the types of visiting ships (bulk carriers, container ships, RoRo vessels, passenger ships, etc.) and port infrastructure constraints, such as spatial limitations and the capacity of the electrical grid required for safe implementation. Additionally, it evaluates the potential for using electricity generated from "green" sources.

Project Goals:

The CIRASIM project aims to analyze the selected ports with different specializations during their collaboration to identify individual and shared challenges and opportunities. Ultimately, an online tool will be created based on reports from the partner ports to help them assess the benefits of implementing Cold Ironing in terms of CO₂ reduction and achieving net-zero CO₂ emissions.

Project Leader: University of Zadar

Partners:

- Central Adriatic Ports Authority (Italy)
- Business Association for Sports, Recreation, Rehabilitation, and Business, Eco Zone Ada Huja (Serbia)
- Port of Ploče Authority (Croatia)
- Institute of Transport (Albania)
- Volos Port Authority S.A. (Greece)
- University 'St. Kliment Ohridski' - Bitola (North Macedonia)
- Ss. Cyril and Methodius University - Faculty of Mechanical Engineering, Skopje (North Macedonia)

Project Duration: September 1, 2024 - August 31, 2027

Total Project Value: 1,561,786.50 EUR