

INDUSTRIAL RUINIFORM LANDSCAPES BETWEEN DEGRADATION AND TOURISM RECONVERSION: CASE STUDY THE STEELWORKS OF CĂLĂRAȘI MUNICIPALITY, ROMANIA

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Abstract

Post-socialist cities in Central and Eastern Europe are characterized by extensive industrial legacies and rapid post-1990 deindustrialization, resulting in brownfields, demographic decline, and functional restructuring. This paper investigates the municipality of Călărași (Romania) as a representative case of a medium-sized industrial city undergoing post-industrial transition. The study aims to assess the potential of industrial heritage—particularly the former steel platform and associated canal–port infrastructure—for tourism development.

A mixed-method approach is employed, combining desk-based research, spatial analysis, demographic data, and comparative benchmarking with Central European cases (Dolní Vítkovice, Ostrava; Nowa Huta, Kraków). The results indicate that Călărași exhibits a significant industrial heritage base, including a large-scale anchor site (approximately 650 ha), alongside a demographic decline of approximately 24% between 1992 and 2021, consistent with patterns of urban shrinkage. However, the absence of formalized interpretive infrastructure and institutional coordination limits its current tourism potential.

The paper argues that industrial heritage tourism can function as a complementary strategy for urban regeneration and identity reconstruction, provided that it is supported by safety management, interpretive frameworks, and integration into broader territorial strategies

Key words: industrial heritage; post-socialist cities; urban shrinkage; industrial tourism; territorial regeneration.

Introduction

The transformation of post-socialist cities represents a major theme in contemporary urban and economic geography. Following the collapse of centrally planned economies, many industrial urban systems in Central and Eastern Europe experienced rapid restructuring, leading to widespread deindustrialization, infrastructural abandonment, and demographic decline (Stanilov, 2007; Turok and Mykhnenko, 2007).

Within this context, former industrial areas have frequently evolved into brownfields or ruinous landscapes, generating socio-economic challenges while simultaneously offering new opportunities for heritage-based redevelopment. Increasing attention has been paid to the role of industrial heritage as a resource for tourism-led regeneration, particularly in regions with strong industrial identities (Edwards and Llurdés, 1996; Hospers, 2002).

The municipality of Călărași provides a relevant case study of a medium-sized post-socialist industrial city facing structural decline. Its large-scale steel platform and associated infrastructure continue to shape the urban landscape, despite significant functional contraction. This paper aims to (i) identify key industrial heritage assets, (ii) evaluate their tourism potential, and (iii) situate the case within a comparative Central European framework.

Material and methods Research Design

The study adopts a mixed-method approach, integrating qualitative and quantitative data sources in order to ensure methodological triangulation and analytical robustness (Creswell, 2014).

Data Sources

The analysis is based on:

- Secondary data, including media reports and historical documentation (Adevărul, Digi24, Jurnalul);
- Demographic data from national censuses (1992–2021);
- Spatial data used for the identification and classification of industrial heritage assets.

Demographic trends indicate a steady population decline from 76,952 inhabitants in 1992 to 58,211 in 2021, corresponding to an overall decrease of approximately 24%.

Spatial Inventory and Classification

A multi-criteria framework was developed to assess industrial sites according to:

- Functional status (active, partially active, abandoned);

- Accessibility (open, restricted, unsafe);
- Heritage value (high, medium, low);
- Integration potential into tourism routes;
- Safety risk levels.

Comparative Analysis

A benchmark analysis was conducted using two well-documented Central European cases: Dolní Vítkovice (Ostrava) and Nowa Huta (Kraków). The comparison focuses on governance structures, safety management, interpretive infrastructure, branding strategies, and integration into tourism networks (Hospers, 2002; Xie, 2015).



Fig. 1: The ruins of the power battery of the steel plant in Călărași

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Fig. 2: The ruins of the steel production laboratories at the Călărași Steel Plant

Survey Design

A standardized questionnaire ($n \approx 200\text{--}400$) was developed to assess local perceptions of industrial heritage, willingness to engage in tourism activities, perceived risks, and preferred tourism products. Although results are not statistically reported here, the instrument provides a framework for future empirical validation.

Results

Industrial Heritage Assets

The analysis identifies the former steel platform as a primary anchor site with significant spatial and symbolic value. Covering approximately 650 hectares, the platform is complemented by a canal–port system that constitutes a distinctive territorial asset. Secondary industrial sites, including former food-processing facilities, contribute to the diversification of the industrial landscape and support the potential development of multi-site tourism routes.



Fig. 3: The ruins of a drawbridge at the water cooling plant at the Călărași Steel Plant.

Demographic Dynamics

Population data reveal a sustained decline between 1992 and 2021, confirming the classification of Călărași as a shrinking city. This demographic contraction is consistent with broader post-industrial restructuring processes observed across Central and Eastern Europe (Turok and Mykhnenko, 2007).

Comparative Insights

The comparative analysis highlights significant differences between Călărași and benchmark cases:

- In Ostrava, the Dolní Vítkovice complex has been successfully converted into a curated heritage site through infrastructure securitization, guided tours, and cultural programming;

- In Kraków, Nowa Huta has been integrated into tourism circuits through narrative-based interpretation of socialist urbanism and industrial history.

In contrast, Călărași lacks formalized visitor infrastructure, coherent interpretive strategies, and institutional coordination mechanisms.

Discussion

The findings support the argument that industrial heritage can serve as a viable resource for tourism development in post-socialist contexts. However, the transition from ruinous landscape to curated heritage requires a set of enabling conditions.

First, **accessibility and safety management** are essential prerequisites for visitor engagement. Industrial sites often present significant risks, necessitating controlled access and infrastructure investments.

Secondly, the development of **interpretive frameworks** is crucial for transforming industrial remnants into meaningful cultural assets. As demonstrated in Nowa Huta, narrative construction plays a central role in shaping visitor experience and reinforcing place identity.

Thirdly, the integration of sites into **thematic tourism networks** enhances territorial cohesion and economic viability by creating multi-destination experiences.

The case of Călărași illustrates an intermediate stage between abandonment and structured valorization. Its unique canal–port infrastructure provides a distinctive opportunity for developing route-based tourism products, including a potential fluvial component not present in many comparable cases.



Fig. 4: The ruins of a vessel from the water cooling plant at the Călărași Steel Plant

Conclusion This study contributes to the literature on post-industrial urban transformation by examining the potential of industrial heritage tourism in a medium-sized post-socialist city. The findings indicate that Călărași possesses significant material and symbolic assets, but remains at an early stage of tourism development.

Industrial heritage tourism should be understood as a **complementary**, rather than substitutive, strategy for urban regeneration. Its successful implementation depends on institutional capacity, strategic planning, and integration into broader territorial policies.

Future research should focus on empirical validation through survey data, as well as on the development of spatial planning scenarios for the integration of industrial heritage into regional tourism systems.



Fig. 5: Recreational area converted from the ruins of the Călărași Steel Plant

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Souhrn

Tato studie zkoumá životaschopnost cestovního ruchu zaměřeného na průmyslové dědictví v Călărași, postsocialistickém středně velkém městě, a dochází k závěru, že ačkoli zde existují významné hmotné i symbolické hodnoty, rozvoj v této oblasti v současné době stagnuje. Pro mezinárodní literaturu má tento výzkum mimořádný význam, protože přesouvá pozornost od dobře zdokumentovaných západních měst k jedinečným výzvám menších východoevropských měst. Kriticky hodnotí cestovní ruch zaměřený na kulturní dědictví jako doplněk, nikoli jako úplnou náhradu za zaniklý průmysl, a zdůrazňuje, že úspěšná regenerace souvisí s institucionální kapacitou a regionální integrací. Představuje nezbytný nástroj pro novou městskou politiku založenou na datech.

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