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# THE ENVIRONMENTAL CREDITWORTHINESS ASSESSMENT METHODOLOGY<sup>1</sup>

## Metodologija presojanja okoljske bonitete

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### Abstract

This paper aims to offer a review of existing theoretical bases of the measurement and assessment of environmental creditworthiness, particularly on the level of enterprises. Its objective is also to examine the possibilities of the multi-criteria assessment of environmental creditworthiness by enterprises themselves ("internal rating"). Following the prescriptive approach, it delineates the particularities of a frame procedure for the multi-criteria assessment of environmental creditworthiness. The credibility of eco-ratings depends not only on the quality of information sources and the choice of sensible environmental indicators, but also on the transformation of data into local and aggregate values that are understandable to decision makers.

**Keywords:** environmental creditworthiness assessment, enterprise, multi-criteria decision making, prescriptive approach, social responsibility

### Izvleček

V prispevku podajamo pregled teoretičnih osnov merjenja in presojanja okoljske bonitete, in sicer predvsem na ravni podjetij. Cilj prispevka je proučiti možnosti večkriterijskega presojanja okoljske bonitete v podjetjih samih (t. i. interni rating). Upoštevajoč preskriptivni pristop, razčlenjujemo posebnosti okvirnega postopka za večkriterijsko presojanje okoljske bonitete. Ugotovljamo, da je kredibilnost ekoringov odvisna ne le od kakovosti informacijskih virov in izbire okoljskih indikatorjev, ampak tudi od transformacije podatkov v odločevalcem razumljive lokalne in agregirane vrednosti.

**Ključne besede:** presojanje okoljske bonitete, podjetje, večkriterijsko odločanje, preskriptivni pristop, družbena odgovornost

### 1 Introduction

In seeking ways to link economic and environmental performance, firms adopt environmental standards when trying to remain competitive or gain a competitive advantage. As a result, they are interested in environmental best practices and environmental creditworthiness (EC), also known as eco-rating, of others and of themselves (Knez-Riedl, 2002, p. 169). The motives for eco-rating assessment are various. Some environmentally conscious enterprises want to choose their partners based on their environmental profile or en-

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multiple more or less conflicting criteria (i.e., factors and indicators of EC). It also helps decision makers confront other participants' judgment, understand the aggregate alternatives' values, and use them in the activities toward sustainability and social responsibility.

Another advantage of MCDM is that it enables group decision making; moreover, it has become a developing tendency in MCDM. Namely, building models for ECA, assigning weights to criteria, and measuring local values of alternatives are the steps of the MCDM in which different interested parties and interdisciplinary professional expertise should contribute. Value functions are effective in integrating expert judgments and decision-maker values, especially when appropriate assessment techniques for environmental decision problems can be applied (Beinat, 1997). Expert-based value functions are able to reproduce expert opinions.

However, firms should be aware that socially responsible and, in this context, environmentally responsible companies cannot necessarily achieve better economic development than other firms. Menz (2010) pointed out that the consideration of social and environmental factors is also directly associated with higher costs because, for example, extensive health and safety measures of modern, environmentally friendly production facilities are expensive, which could result in a company's decrease in profitability and competitiveness. As the side effects caused by entrepreneurial activity (for example, air and water pollution, health impairments) are often not or not fully borne by the polluter (imperfect internalization of external effects), less responsible companies could benefit economically at the expense of society.

The credibility of eco-ratings depends on the quality of information sources and the choice of sensible environmental indicators. Still, indicators or ratios are not enough. Information and indicators should contribute to high-quality analyses and resulting findings as well as recommendations and suggestions. In terms of analyses, different types are in use (for example, integrated analyses, portfolio analyses) in addition to staggered approaches (ADFIAP, 2009). The multi-criteria assessment of EC proposed in this paper presents such a methodology that can bring about more reliable results.

Finally, we cannot overlook the fact that environmental performance is only one dimension of the triple-bottom-line concept, and environmental assessments and reports are just a part of sustainability assessments and reports. What's more, the preparation of integrated reporting occurs before launching an international integrated reporting framework (IIRC, 2012). In this context, all three reports (economic, environmental, and social) should be unified into one report. However, the connectedness between them should be professionally analyzed and interdependencies explained. Environmental creditworthiness assessment methodology can be instrumental in this endeavor.

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