

# Accepted Manuscript

Sustainability experiences in the wine sector: Towards the development of an international indicators system

Roberto Merli, Michele Preziosi, Alessia Acampora



PII: S0959-6526(17)31299-4

DOI: [10.1016/j.jclepro.2017.06.129](https://doi.org/10.1016/j.jclepro.2017.06.129)

Reference: JCLP 9879

To appear in: *Journal of Cleaner Production*

Received Date: 23 June 2016

Revised Date: 8 June 2017

Accepted Date: 14 June 2017

Please cite this article as: Merli R, Preziosi M, Acampora A, Sustainability experiences in the wine sector: Towards the development of an international indicators system, *Journal of Cleaner Production* (2017), doi: 10.1016/j.jclepro.2017.06.129.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Sustainability experiences in the wine sector: towards the development of an international indicators system

Roberto Merli\*, Michele Preziosi and Alessia Acampora

Received: date; Accepted: date; Published: date

Academic Editor: name

Department of Business Studies – Roma Tre University, Via Silvio D'Amico, 77 – 00145 Roma, Italy;

[roberto.merli@uniroma3.it](mailto:roberto.merli@uniroma3.it); [michele.preziosi@uniroma3.it](mailto:michele.preziosi@uniroma3.it); [acampora.alessia@gmail.com](mailto:acampora.alessia@gmail.com).

\* Correspondance: [roberto.merli@uniroma3.it](mailto:roberto.merli@uniroma3.it); Tel.: +39-335-7107033

## Abstract:

Increasing awareness for sustainability has led to the proliferation of initiatives in the wine industry. These initiatives mainly aim at managing the environmental aspects related to wine production. In this context, the identification of suitable indicators is crucial to evaluate the industry's progress toward sustainability. Firstly, in the present study, the main environmental impacts of wine production are reviewed, with specific reference to LCA studies. On this baseline, the main programs from the New World, Europe and Italy that address sustainability in the wine sector are examined. Results show that each program has its strengths and weaknesses, but there is still a large margin to merge the best of these programs in one unique protocol internationally recognized. Therefore, the authors have compared the set of indicators employed by two specific wine industries initiatives (the Italian VIVA and Californian CSWA) and the indicators implemented by the wine Italian companies certified with the Environmental Management System (EMS), defined by the European Regulation EMAS. A specific evaluation framework has been developed to assess the comprehensiveness of these indicators in terms of their capacity to address the triple bottom line of sustainability. Findings reveal that while V.I.V.A consider environmental, economic and social aspects, CSWA and EMAS focus only on environmental impacts of wine production. Additionally, only EMAS has an approach to the evaluation of raw materials efficiency and waste management. The outcome of the study integrates existing literature on sustainable wine production, expanding the scope of previous analysis and introducing an evaluation framework that stakeholders of the industry may apply to introduce new sets indicators to assess sustainability performances of wine producers.

**Keywords:** wine; sustainability; indicators; EMS; environment

## 1. Introduction

Sustainability is one of the main goals of the EU and other international organizations' development policy. This is also confirmed by the Europe 2020 Strategy, which aims to promote a smart, sustainable, and inclusive growth. Sustainability is progressively gaining importance also in the wine sector (Borsellino et al., 2016; Chiusano et al., 2015; Corbo et al., 2014; Santiago-Brown et al., 2015; Stoughton et al., 2013). For wine production, however, environmental issues have been largely unexplored (Marshall et al., 2005), because it has been traditionally seen as an environmentally friendly process (Barber et al., 2009). Instead the wine sector is far from being eco-friendly (Gabzdylova et al., 2009): it benefits from public goods such as natural resources, ecosystems, clean water, but it also brings costs and negative externalities transferred to society and the surrounding environment (Christ and Burritt, 2013; Penco, 2012). Understanding the nature and the extent of these externalities could help to prepare firms to deal with the potential impact of externalities regulation, to promote responsibility towards consumers, and to identify opportunities for innovation and resources savings. In recent years, this awareness has led the "World of Wine" to show wide attention to the environment, identifying it as an element of the wine quality itself (Bruwer and Alant, 2009). The concept of sustainability in this area, however, has many definitions that often seem to be surrounded by a shadow of ambiguity (Warner, 2007). Sustainable vitiviniculture is defined by the OIV (International Organization of Vine and Wine) as a "global strategy on the scale of the grape production and processing systems, incorporating at the same time the economic sustainability of structures and territories, producing quality products,

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات