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Combining Type I and Type III eco-labels: a successful experience in the wine sector

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United Nations Educational, Scientific and Cultural Organization

UNESCO Chair in Life Cycle and Climate Change

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LIFE HAproWINE

Integrated waste management and life cycle assessment in the wine industry. From waste to high-value products.

January 2010 - December 2013

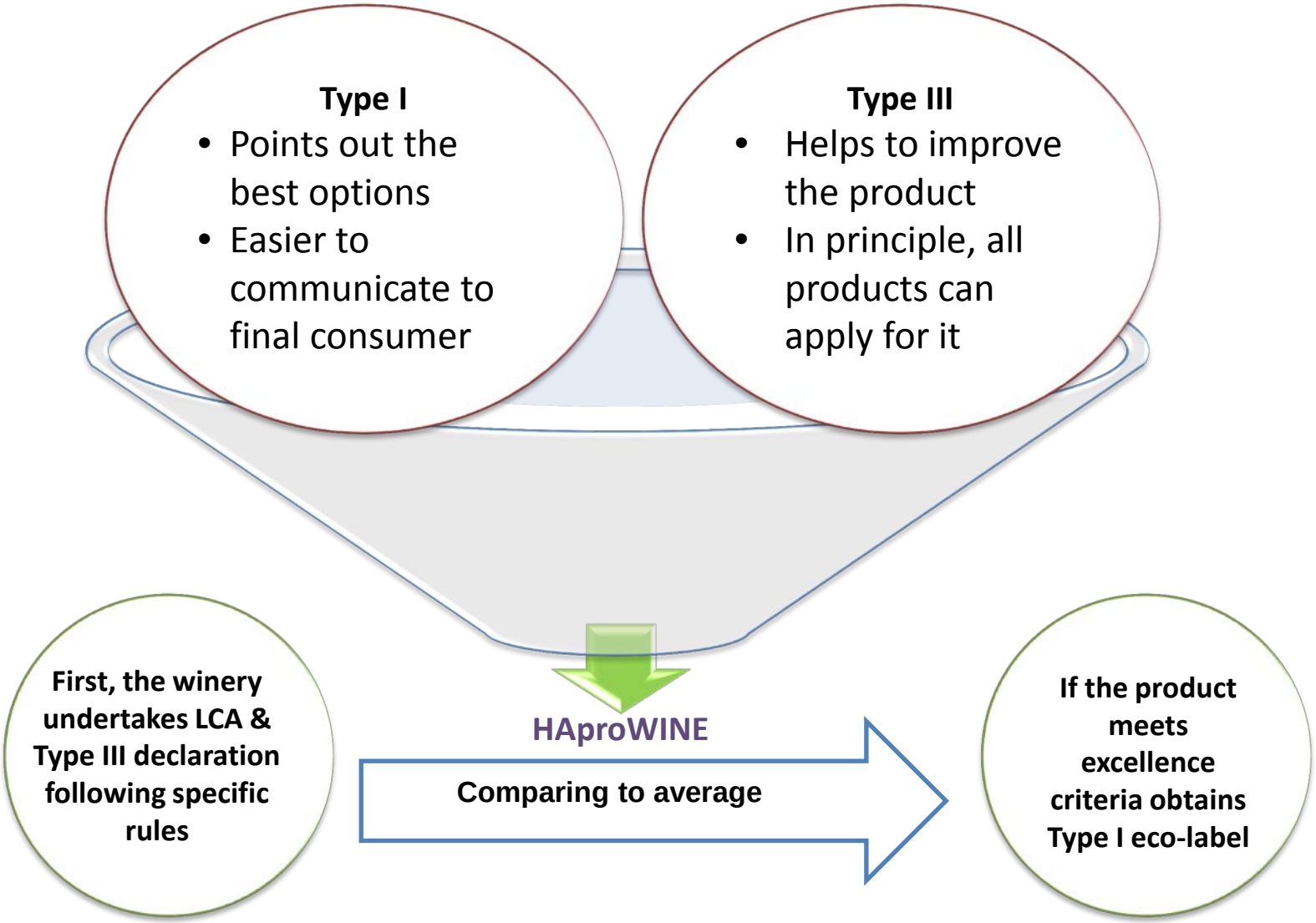
www.haprowine.eu

LIFE08 ENV/E/000143

Eco-labels: ISO classification

Type I – ISO 14024	Type II – ISO 14021	Type III – ISO 14025
Environmental preference	Environmental claim	Environmental information
Qualitative	Qualitative	Quantitative
Life cycle considerations	Best practice	Life Cycle Assessment methodology
Multiple criteria	Single criterion	Multiple criteria
Third-party certified	Developed by manufacturers	Third-party verified
Certification mark on the product	Statement / logotype on the product	Report

LIFE HAproWINE: combination of Type I and Type III eco-labels



LIFE HAproWINE: combination of Type I and Type III eco-labels



Collaboration with wineries and experts throughout all the project

First, the winery undertakes LCA & Type III declaration following specific rules

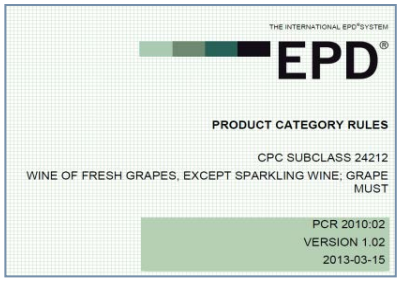
HAproWINE

Comparing to average

If the product meets excellence criteria obtains Type I eco-label

Development of HAproWINE eco-label (1/2)

First, the winery undertakes LCA & Type III declaration following specific rules

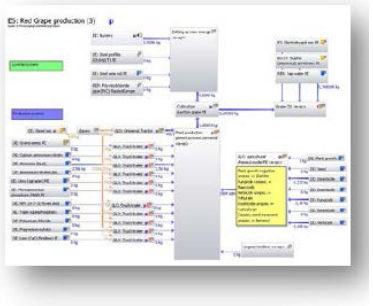


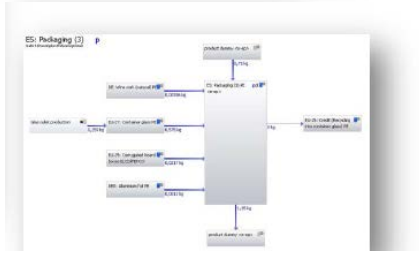
1. Development of Product Category Rules (PCR):
   - First draft taking into account pre-existing documents, LCA studies, gathered inventory data, etc.
   - Experts review
   - Open consultation
2. Template for the environmental declaration

Once published (Spanish and English), the PCR will be sent to administrators of EPD systems for its eventual publication.

Development of HAproWINE eco-label (2/2)

If the product meets excellence criteria obtains Type I eco-label





1. Impact categories and indicators selected:
   - Global Warming Potential
   - Eutrophication Potential
   - Primary energy consumption (non renewable)
   - Water consumption
2. Definition of thresholds for each impact category/indicator (ranking system):
   - Pilot LCA and Type III declarations
   - Literature review

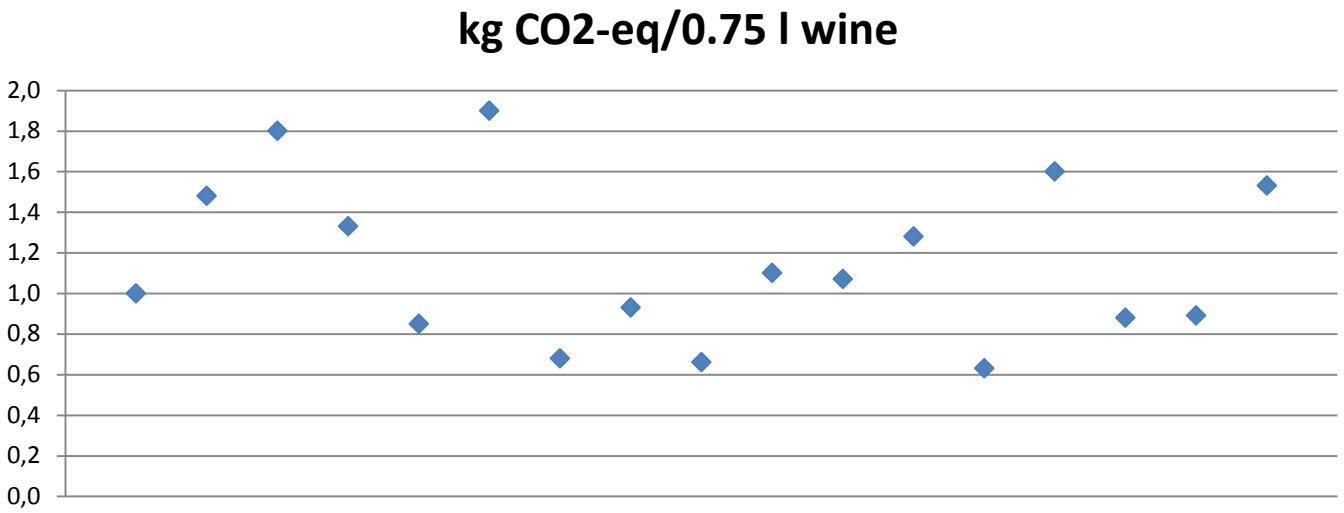
Type I eco-label thresholds (1/2)

1. Gazulla C. et al. (2010) **Taking a life cycle look at crianza wine production in Spain: Where are the bottlenecks?** Int J Life Cycle Assess
2. Point E. et al (2012) **Life Cycle Environmental Impacts of Wine Production and Consumption in Nova Scotia, Canada.** Journal of Cleaner Production
3. Ardente F. et al (2006) **POEMS: A Case Study of an Italian Wine-Producing Firm** Environmental Management
4. Neto B. et al **(2013) Life cycle assessment of the supply chain of a Portuguese wine: from viticulture to distribution.** Int J Life Cycle Assess
5. Pizzigallo A. C. I. et al (2006) **The joint use of LCA and energy evaluation for the analysis of two Italian wine farms.** Journal of Environmental Management
6. Bosco S. et al (2011) **Greenhouse gas emissions in the agricultural phase of wine production in the Maremma rural district in Tuscany, Italy.** Italian Journal of Agronomy

Similar system boundaries, functional unit and LCIA methods

Type I eco-label thresholds (2/2)

Example: Global Warming Potential

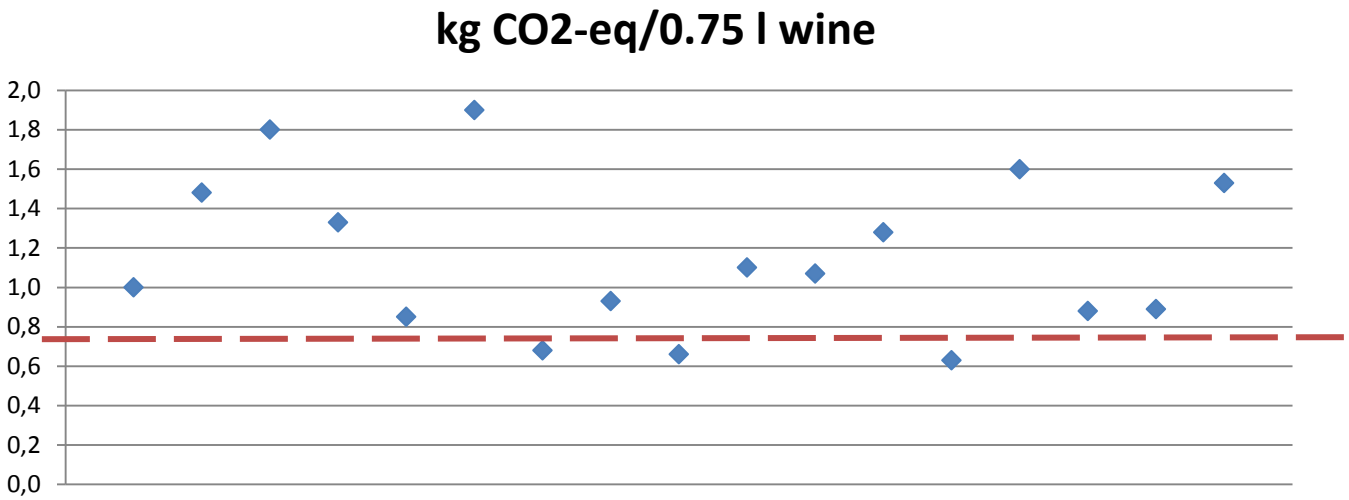


19 references analyzed so far (6 Spanish wineries + 13 previous studies)

Values from 0.63 to 1.9 kg CO_2-eq per 1 bottle of wine (0.75 liters)

Type I eco-label ranking system (1/2)

- Only the best products can be awarded Type I eco-label



Type I eco-label ranking system (2/2)

- Only the best products can be awarded Type I eco-label
- We assume all the indicators have the same importance
- Raking system from 0 to 12 possible points (the higher value, the better environmental performance)
- Scoring based on distance to target values (different options being tested)
- Regular update of values for triggering continuous improvement

Conclusions

- Eco-label type I can be based on (verified) Type III declarations:
  - That would reduced time and costs for eco-labelling schemes administrators and applicant companies
  - More Type III declarations are needed

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Thank you!

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Life Cycle Initiative

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