

OILCA PROJECT: ENHANCING COMPETITIVENESS AND REDUCING CARBON FOOTPRINT OF OLIVE OIL PROCESSES THROUGH WASTE MANAGEMENT OPTIMISATION USING LIFE CYCLE ASSESSMENT

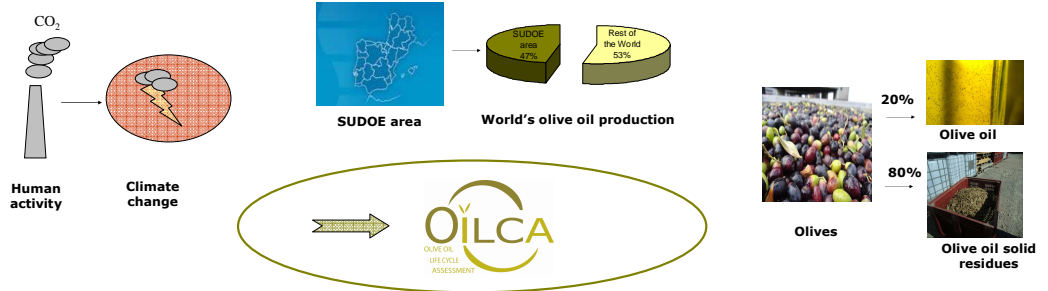


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CONTEXT

OiLCA [1] is a **research program** that promotes olive oil sector competitiveness through environmental protection within the context of the energy crisis and the rising environmental awareness of consumers.



METHODOLOGY

Life cycle assessment (ISO 14040 [2] & ISO 14044 [3] Standards)

Goal & scope

Functional unit: "produce 1 liter of olive oil"

7 steps under evaluation

Identification of different waste treatment processes

Inventory

Real data from 55 enterprises (Spanish, Portuguese, French)

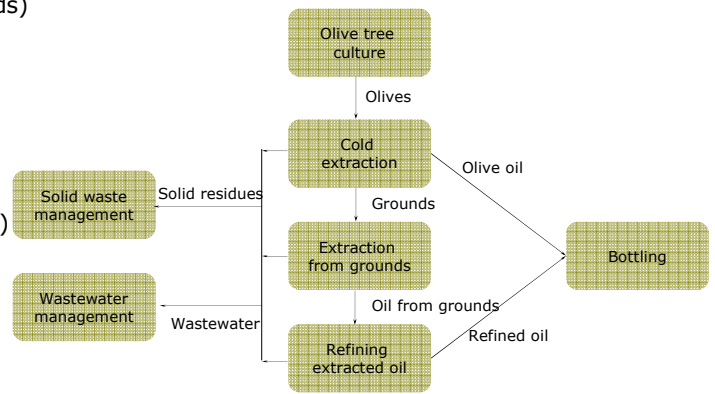
7 steps under evaluation

Completed by European database

Impacts assessment

Calculated with SimaPro®

IPCC 2007 protocol for climate change assessment



System of olive oil production

Life cycle cost

EXPECTED RESULTS

OiLCA expects three main results:

- ✓ Construction of a **European database** about olive oil production
- ✓ Development of an Environmental management **computer tool** for workers from olive oil sector
- ✓ Creation of an **Environmental label** to communicate the efforts of the olive oil sector to limit global warming

PARTNERS



AOTAD is an association that represents olive oil manufacturers from the Tras-o-Montes region. AOTAD helps CVR collect data on this region of Portugal.

CITOLIVA is a centre for technology and innovation. As leader of the project, this group is responsible for strategic coordination and for the follow-up of OiLCA.

CTM is a technological centre that aims to efficiently contribute to the improvement of competitiveness and to stimulate the technological development of companies by providing specialized services and carrying out R+D + IT projects. CTM is responsible for developing the life cycle assessment methodology, and it provides information about olive oil production in Cataluña.



CVR is an institution for research and scientific analysis whose field is waste management. CVR is partly responsible for the external communication of the project, and it provides information about olive oil production in Portugal



IAT is a technological centre of engineering and knowledge management whose mission is assisting companies and institutions with the improvement of their sustainability results, adding value through innovative solutions. As an OiLCA partner, IAT is responsible for environmental label development, and it provides information about olive oil production in Andalusia



LCA is a higher education, research and transfer of technology centre that specializes in agro-resources. LCAI is responsible for the communication of the project, and it provides information about olive oil production in France.

REFERENCES

- [1] OiLCA (2011) Enhancing the competitiveness and reducing the carbon footprint of the olive oil sector through waste management optimization and the establishment of an ecological label, <http://www.oilca.eu/index.htm>
 [2] ISO 14040, (2006) "Environmental management - life cycle assessment - principles and framework", Geneva, Switzerland, International Standard Organisation
 [3] ISO 14044, (2006) "Environmental management - life cycle assessment - requirements and guidelines", Geneva, Switzerland, International Standard Organisation

