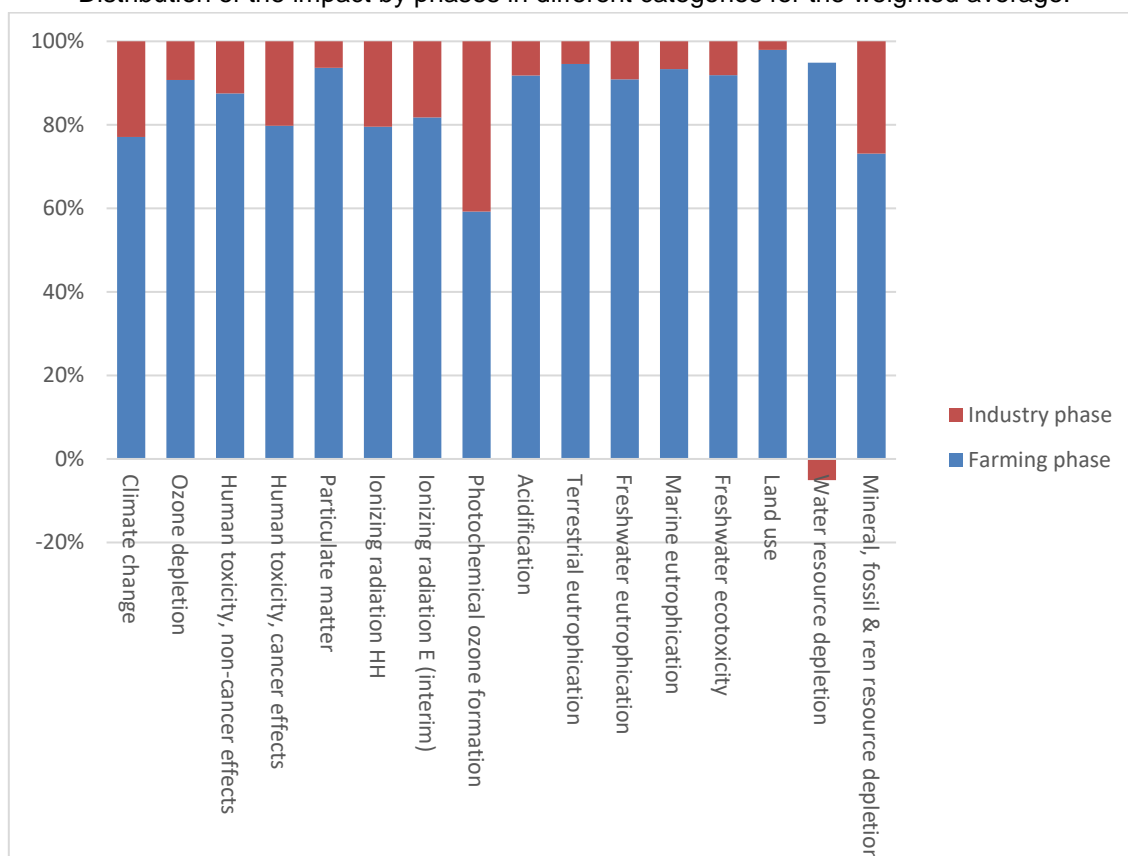


# Life Cycle Assessment of the Spanish virgin olive oil production. Main results

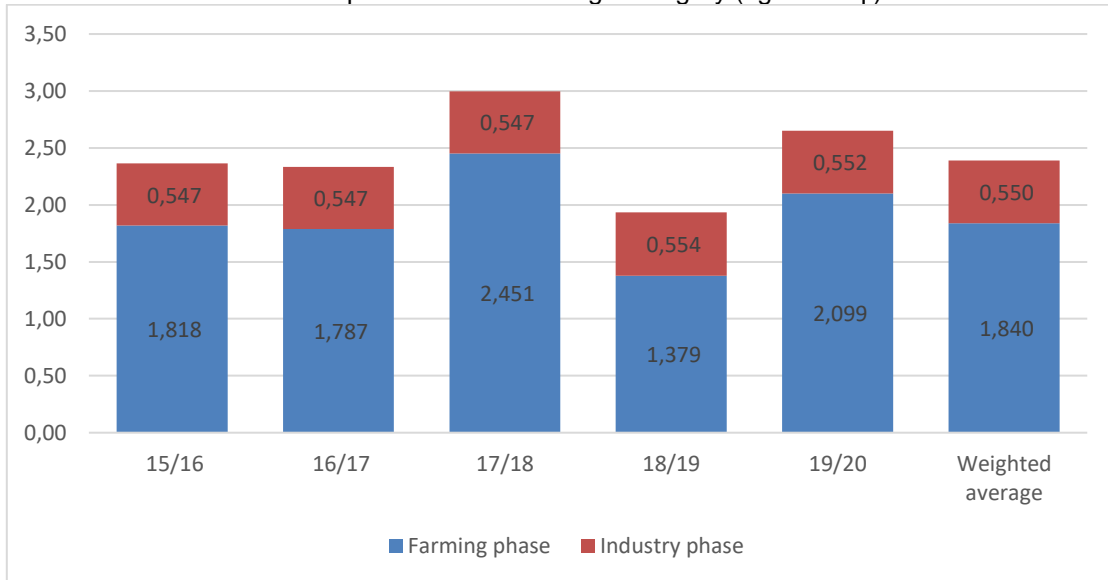
Comparative analysis of the LCA (per FU) for five harvests (15/16 to 19/20) in Jaen.

Total impact	Unit	15/16	16/17	17/18	18/19	19/20	Weighted average
Climate change	kg CO <sub>2</sub> eq	2.36E+00	2.33E+00	3.00E+00	1.93E+00	2.65E+00	2.39E+00
Ozone depletion	kg CFC-11 eq	1.76E-07	1.73E-07	2.32E-07	1.38E-07	2.01E-07	1.78E-07
Human toxicity, non-cancer effects	CTUh	1.05E-06	1.04E-06	1.37E-06	8.32E-07	1.20E-06	1.06E-06
Human toxicity, cancer effects	CTUh	1.01E-07	9.97E-08	1.29E-07	8.19E-08	1.14E-07	1.02E-07
Particulate matter	kg PM <sub>2.5</sub> eq	1.63E-03	1.60E-03	2.16E-03	1.26E-03	1.87E-03	1.65E-03
Ionizing radiation HH	kBq U235 eq	2.46E-01	2.42E-01	3.14E-01	1.99E-01	2.76E-01	2.48E-01
Ionizing radiation E (interim)	CTUe	1.04E-06	1.03E-06	1.34E-06	8.40E-07	1.18E-06	1.05E-06
Photochemical ozone formation	kg NMVOC eq	1.54E-02	1.52E-02	1.86E-02	1.33E-02	1.69E-02	1.55E-02
Acidification	molc H+ eq	1.35E-02	1.32E-02	1.77E-02	1.05E-02	1.54E-02	1.36E-02
Terrestrial eutrophication	molc N eq	5.09E-02	5.00E-02	6.76E-02	3.93E-02	5.83E-02	5.15E-02
Freshwater eutrophication	kg P eq	5.67E-04	5.59E-04	7.47E-04	4.44E-04	6.48E-04	5.74E-04
Marine eutrophication	kg N eq	3.67E-03	3.61E-03	4.86E-03	2.85E-03	4.20E-03	3.71E-03
Freshwater ecotoxicity	CTUe	3.24E+01	3.19E+01	4.28E+01	2.53E+01	3.71E+01	3.28E+01
Land use	kg C deficit	4.80E+01	4.72E+01	6.44E+01	3.67E+01	5.53E+01	4.86E+01
Water resource depletion	m <sup>3</sup> water eq	5.22E-02	5.13E-02	7.15E-02	3.89E-02	6.08E-02	5.29E-02
Mineral, fossil & ren resource depletion	kg Sb eq	2.40E-04	2.37E-04	3.01E-04	1.99E-04	2.68E-04	2.43E-04

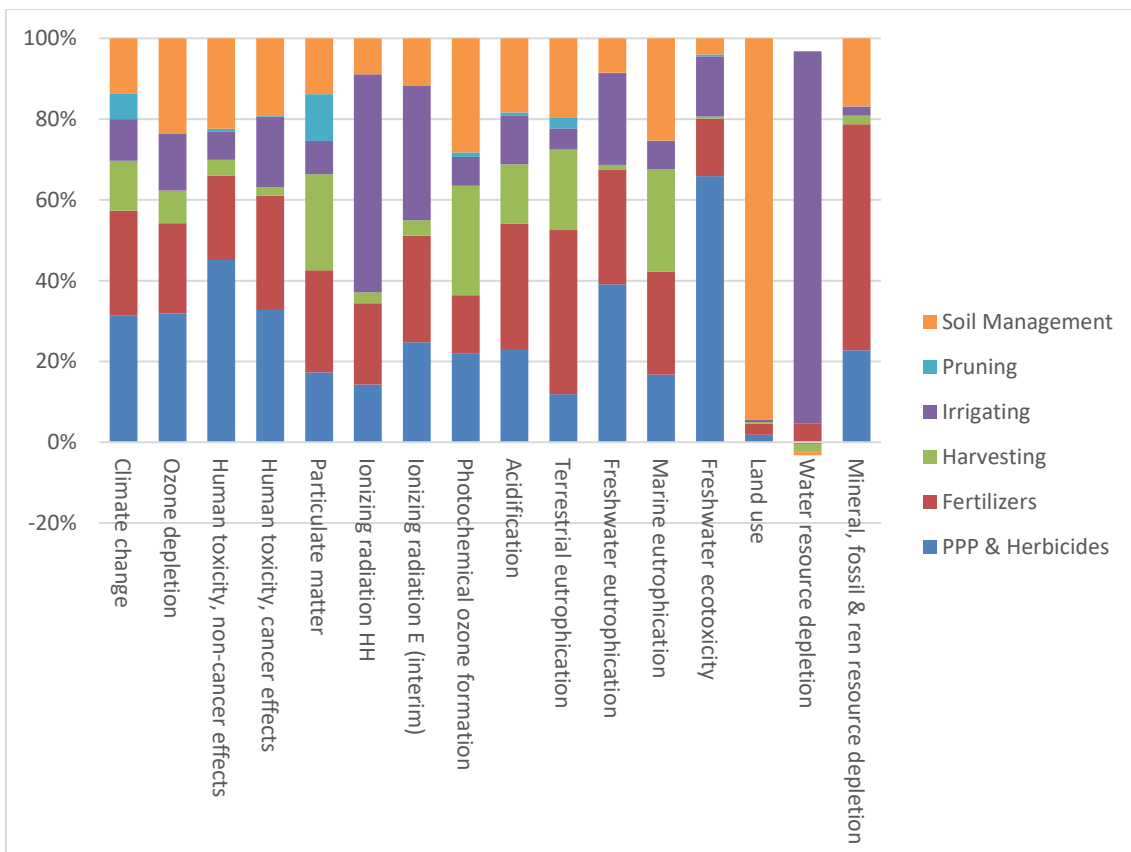
Distribution of the impact by phases in different categories for the weighted average.



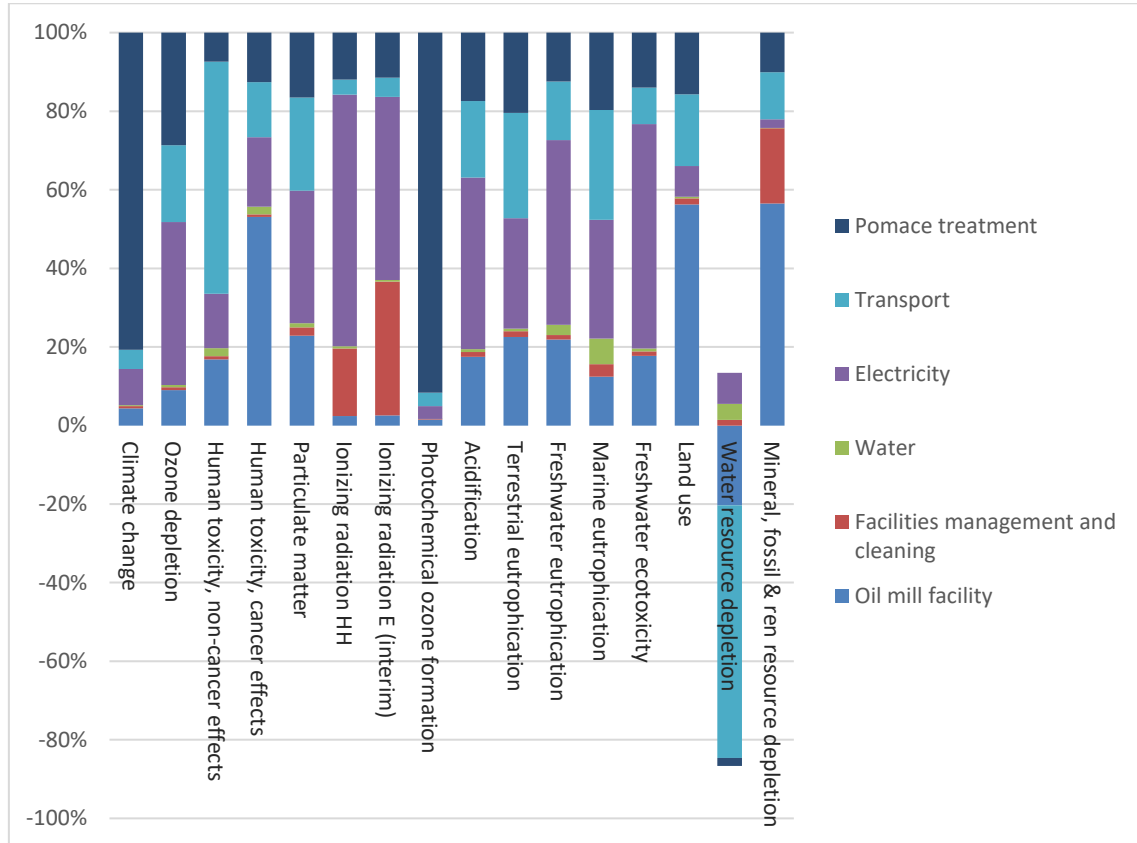
Phase impact in Climate change category (kg CO<sub>2</sub> eq.).



Distribution of the impact of the farming phase in different categories for the weighted average.



Distribution of the impact of the industrial phase in different categories for the weighted average.



CO<sub>2</sub> equivalent balance for climate change category based in the long-term carbon sequestration hypothesis for different harvests and weighted average.

