

Correction

Correction: L'Haridon et al. SPOT: A Strategic Life-Cycle-Assessment-Based Methodology and Tool for Cosmetic Product Eco-Design. *Sustainability* 2023, 15, 14321

Jacques L'Haridon ^{1,*}, Laure Patouillard ², Julien Pedneault ², Anne-Marie Boulay ², François Witte ³, Marcial Vargas-Gonzalez ³, Philippe Bonningue ⁴, Isabelle Rollat ¹, Thierry Blanchard ⁴, Gabriel Goncalves ⁴, Alice Hervio ⁴ and Laurent Gilbert ¹

¹ L'Oréal Research & Innovation, 1 Avenue Eugène Schueller, 93600 Aulnay-Sous-Bois, France

² CIRAIG, Department of Chemical Engineering, Polytechnique Montreal, 3333 Queen Mary Rd Suite 310, Montreal, QC H3V 1A2, Canada

³ Quantis, 15 Rue de Cléry, 75002 Paris, France

⁴ L'Oréal Opérations, 9 Rue Pierre Dreyfus, 92110 Clichy, France

* Correspondence: jacques.lharidon@loreal.com

The authors would like to make the following corrections to the original publication [1]:

As seven parts of the table content required amendment, the authors have replaced the original Table 1 with the following Table 1:

Table 1. Overview of LCIA indicators, impact methods, normalization, and weighting factors.

LCIA Indicator	Impact Method	Indicator Unit	Normalization Factor (Unit per Person per Year)	Weighting Factor
Climate Change	GWP 100 years from IPCC 2013	kg CO ₂ eq.	8.10×10^3	25.50%
Water Scarcity	AWaRe 100	L of water eq. of deprived water	1.15×10^7	1.40%
Freshwater Ecotoxicity	For emissions in water during formula end-of-life: LAIM For other emissions: USEtox v1.01	CTUe	9.00×10^3	2.31%
Freshwater Eutrophication	EUTREND model	kg P eq.	1.61×10^0	8.78%
Marine Eutrophication	EUTREND model	kg N eq.	1.95×10^1	1.50%
Acidification	Accumulated Exceedance model	mol H ⁺ eq.	5.56×10^1	1.45%
Land Use	Soil Organic Matter (SOM) model, LANCA [34]	points	8.19×10^5	25.43%



Received: 13 May 2025

Accepted: 23 May 2025

Published: 12 June 2025

Citation: L'Haridon, J.; Patouillard, L.; Pedneault, J.; Boulay, A.-M.; Witte, F.; Vargas-Gonzalez, M.; Bonningue, P.; Rollat, I.; Blanchard, T.; Goncalves, G.; et al. Correction: L'Haridon et al.

SPOT: A Strategic Life-Cycle-Assessment-Based Methodology and Tool for Cosmetic Product Eco-Design. *Sustainability* 2023, 15, 14321.

Sustainability 2025, 17, 5414.

<https://doi.org/10.3390/su17125414>

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license

(<https://creativecommons.org/licenses/by/4.0/>).

Table 1. Cont.

LCIA Indicator	Impact Method	Indicator Unit	Normalization Factor (Unit per Person per Year)	Weighting Factor
Terrestrial Eutrophication	Accumulated Exceedance model	mol N eq.	1.77×10^2	0.83%
Resource Depletion (Mineral and Fossil)	CML2002 ADP fossil and mineral, reserve base	kg Sb eq.	1.93×10^{-1}	11.13%
Human Toxicity	Human toxicity (cancer and non-cancer) from USEtox v1.01	CTUh	5.87×10^{-4}	3.17%
Particulate Matter	RiskPoll, UNEP recommended model [35], expressed in kg PM2.5 eq.	kg PM2.5 eq.	2.50×10^0	16.25%
Ionizing Radiation	Human Health effect model	kBq U235 eq.	4.22×10^3	0.04%
Photochemical Ozone Formation	LOTOS-EUROS model [36] as applied in ReCiPe	kg NMVOC eq.	4.06×10^1	1.47%
Ozone Depletion	EDIP model based on the ODPs of the World Meteorological Organization (WMO) over an infinite time horizon.	kg CFC11 eq.	5.36×10^{-2}	0.76%

The authors state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.

Reference

1. L'Haridon, J.; Patouillard, L.; Pedneault, J.; Boulay, A.-M.; Witte, F.; Vargas-Gonzalez, M.; Bonningue, P.; Rollat, I.; Blanchard, T.; Goncalves, G.; et al. SPOT: A Strategic Life-Cycle-Assessment-Based Methodology and Tool for Cosmetic Product Eco-Design. *Sustainability* **2023**, *15*, 14321. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.