

Product Environmental Profile

Mobiya Original Solar Lantern





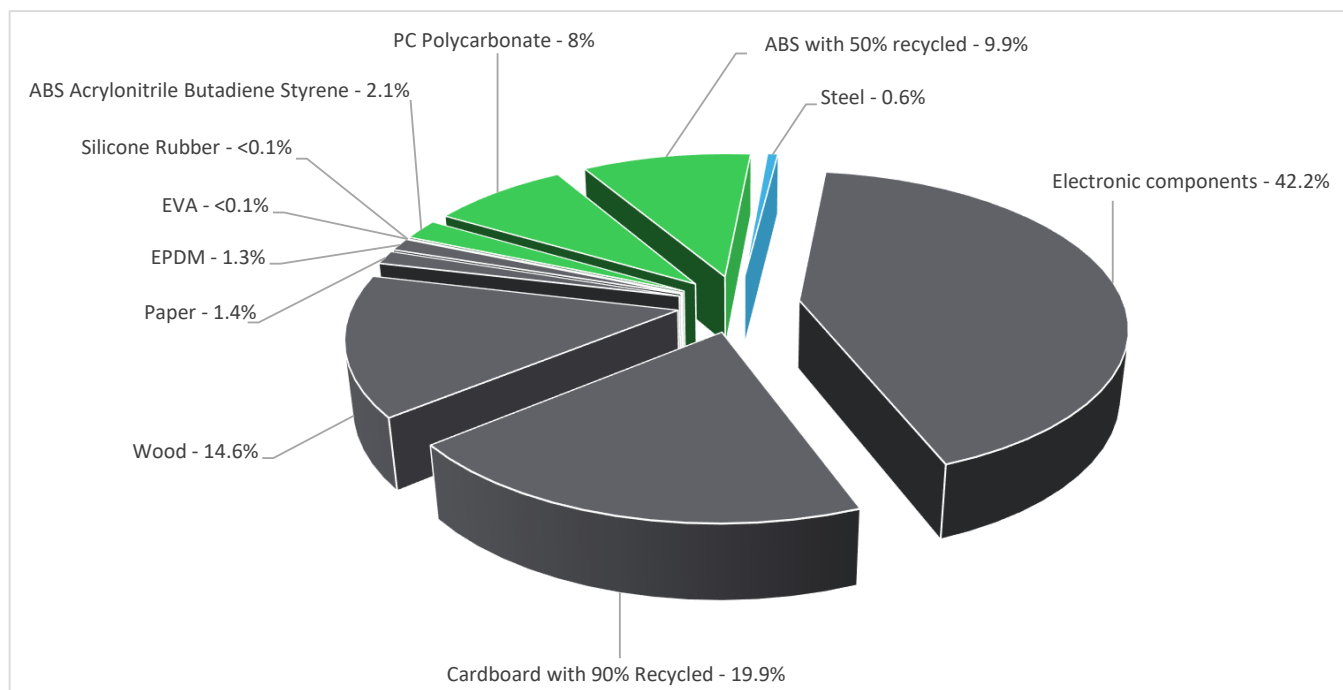
General information

| | |
|-----------------------------------|---|
| Representative product | Mobyia Original Solar Lantern - AEP-LR01-S2000 |
| Description of the product | The Mobyia Original is a robust and water-resistant solar powered lamp which is providing safe, reliable, and sustainable energy for lighting and designed with latest human-centric LED technology. Its white light with variable intensity and its innovative mounting options can conveniently light up all surroundings. |
| Functional unit | This Product has combination of functions, a lamp supplying 280 Lumens of light for 4 hours if used continuously and USB port, with a built in Battery which can be charged using Solar panel or a 5V DC and can be used for 10 years in accordance with product standards EN 61547:2009, IEC 60598-2-4:2017, IEC 62471:2006 and with protection class of IP65 in accordance with the standard IEC 60529. |



Constituent materials

Reference product mass 1520 g including the product, its packaging and additional elements and accessories



| | |
|----------|-------|
| Plastics | 20.0% |
| Metals | 0.6% |
| Others | 79.4% |



Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers – PBDE), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate– BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>

Additional environmental information

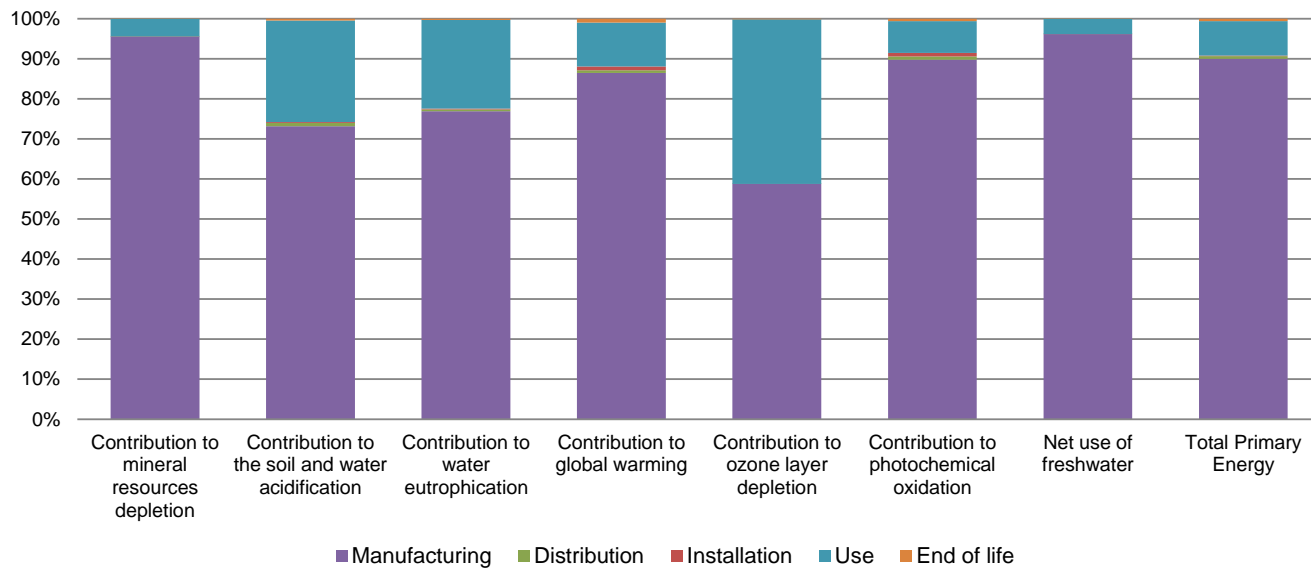
The Mobiya Original Solar Lantern presents the following relevant environmental aspects

| | |
|----------------------|---|
| Manufacturing | Manufactured at a Schneider Electric production site ISO14001 certified |
| Distribution | Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 520.8 g, consisting of Cardboard (57.7 %), Wood (42.2%) and Paper (0.1%) Product distribution optimised by setting up local distribution centres |
| Installation | The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials are accounted for during the installation phase (including transport to disposal). |
| Use | Internal battery (88g) based on its performance at the end of 5 Years Customers can opt for replacement if needed. |
| End of life | End of life optimized to decrease the amount of waste and allow recovery of the product components and materials This product contains Battery (88g) , Printed Circuit Board DRIVER & LED (26.7g) & Printed Circuit Board USB (8.8g) that should be separated from the stream of waste so as to optimize end-of-life treatment. The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider-Electric Green Premium website http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page Recyclability potential: 20% Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME). |

Environmental impacts

| | | | | |
|---|---|--|--|--|
| Reference life time | 10 years | | | |
| Installation elements | No special installation components need during installation phase, but transport of packaging to disposal, and disposal of packaging accounted for during installation. | | | |
| Use scenario | Uses Solar Power | | | |
| Geographical representativeness | GLOBAL | | | |
| Technological representativeness | The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are Similar and representative of the actual type of technologies used to make the product in production. | | | |
| Energy model used | Manufacturing | Installation | Use | End of life |
| | Manufacturing Plant Location: Dongguan, China | Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27 | Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27 | Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27 |

| Compulsory indicators | | Mobiya Original Solar Lantern - AEP-LR01-S2000 | | | | | |
|--|-------------------------------------|--|---------------|--------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to mineral resources depletion | kg Sb eq | 1.62E-03 | 1.55E-03 | 0* | 0* | 7.16E-05 | 0* |
| Contribution to the soil and water acidification | kg SO ₂ eq | 9.07E-02 | 6.64E-02 | 6.91E-04 | 1.88E-04 | 2.30E-02 | 3.81E-04 |
| Contribution to water eutrophication | kg PO ₄ ³⁻ eq | 3.48E-02 | 2.68E-02 | 1.59E-04 | 7.49E-05 | 7.70E-03 | 1.15E-04 |
| Contribution to global warming | kg CO ₂ eq | 2.48E+01 | 2.15E+01 | 1.51E-01 | 2.50E-01 | 2.71E+00 | 2.42E-01 |
| Contribution to ozone layer depletion | kg CFC11 eq | 9.67E-06 | 5.68E-06 | 0* | 0* | 3.97E-06 | 1.53E-08 |
| Contribution to photochemical oxidation | kg C ₂ H ₄ eq | 6.41E-03 | 5.76E-03 | 4.94E-05 | 5.89E-05 | 5.05E-04 | 3.98E-05 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Net use of freshwater | m3 | 1.19E+00 | 1.14E+00 | 0* | 0* | 4.49E-02 | 2.34E-04 |
| Total Primary Energy | MJ | 3.18E+02 | 2.87E+02 | 2.13E+00 | 4.62E-01 | 2.72E+01 | 1.96E+00 |



| Optional indicators | | Mobyia Original Solar Lantern - AEP-LR01-S2000 | | | | | |
|---|------|--|---------------|--------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to fossil resources depletion | MJ | 2.20E+02 | 1.96E+02 | 2.12E+00 | 4.39E-01 | 1.98E+01 | 1.51E+00 |
| Contribution to air pollution | m³ | 2.33E+03 | 1.95E+03 | 6.48E+00 | 6.15E+00 | 3.45E+02 | 1.58E+01 |
| Contribution to water pollution | m³ | 2.35E+03 | 2.05E+03 | 2.48E+01 | 4.95E+00 | 2.59E+02 | 1.66E+01 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Use of secondary material | kg | 3.65E-01 | 3.65E-01 | 0* | 0* | 0* | 0* |
| Total use of renewable primary energy resources | MJ | 9.88E+00 | 8.92E+00 | 2.84E-03 | 5.56E-03 | 9.42E-01 | 1.94E-03 |
| Total use of non-renewable primary energy resources | MJ | 3.08E+02 | 2.78E+02 | 2.13E+00 | 4.57E-01 | 2.63E+01 | 1.95E+00 |
| Use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 4.01E+00 | 3.06E+00 | 2.84E-03 | 5.56E-03 | 9.42E-01 | 1.94E-03 |
| Use of renewable primary energy resources used as raw material | MJ | 5.87E+00 | 5.87E+00 | 0* | 0* | 0* | 0* |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 2.96E+02 | 2.66E+02 | 2.13E+00 | 4.57E-01 | 2.57E+01 | 1.95E+00 |
| Use of non renewable primary energy resources used as raw material | MJ | 1.22E+01 | 1.17E+01 | 0* | 0* | 5.35E-01 | 0* |
| Use of non renewable secondary fuels | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Use of renewable secondary fuels | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Waste categories | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Hazardous waste disposed | kg | 7.38E+01 | 3.72E+01 | 0* | 0* | 3.46E+01 | 1.95E+00 |
| Non hazardous waste disposed | kg | 1.12E+01 | 8.70E+00 | 5.36E-03 | 1.78E-01 | 2.29E+00 | 1.88E-02 |
| Radioactive waste disposed | kg | 1.19E-02 | 1.02E-02 | 3.81E-06 | 6.53E-06 | 1.68E-03 | 1.12E-05 |
| Other environmental information | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Materials for recycling | kg | 6.26E-01 | 7.04E-02 | 0* | 3.62E-01 | 0* | 1.93E-01 |
| Components for reuse | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Materials for energy recovery | kg | 3.85E-02 | 0* | 0* | 0* | 0* | 3.85E-02 |
| Exported Energy | MJ | 1.52E-01 | 1.43E-02 | 0* | 1.38E-01 | 0* | 0* |

* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version 5.9.3, database version 2020-12 in compliance with ISO14044.

The manufacturing phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

| | | | |
|--|---------------------|-------------------------------------|--|
| Registration number | ENVPEP2202004_V1_EN | Drafting rules | PCR-ed3-EN-2015 04 02 |
| Date of issue | 04/2022 | Supplemented by | PSR-0014-ed1.0-EN-2018 07 18 |
| Validity period | 5 years | Information and reference documents | www.pep-ecopassport.org |
| <i>Independent verification of the declaration and data</i> | | | |
| Internal | X | External | |
| <i>The elements of the present PEP cannot be compared with elements from another program.</i> | | | |
| <i>Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »</i> | | | |

Schneider Electric Industries SAS
Country Customer Care Center
<http://www.schneider-electric.com/contact>
35, rue Joseph Monier
CS 30323
F- 92506 Rueil Malmaison Cedex
RCS Nanterre 954 503 439
Capital social 896 313 776 €

www.schneider-electric.com

ENVPEP2202004_V1_EN

Published by Schneider Electric

© 2019 - Schneider Electric – All rights reserved

04/2022