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Sustainable Photovoltaics Integration in buildings and Infrastructure for multiple applications



SPHINX - Deliverable report

Deliverable 6.2 - LCA report on Sphinx IPV products





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Public Summary

This document is related to work package WP6 with the topic "Economic, Environmental and Sustainability assessment and recommendations" and reports the achievements for Deliverable D6.2 of the SPHINX project which has the goal to determine the sustainability of the integrated photovoltaic (IPV) products at the creation stage in order to initiate improvements. Therefore, an environmental life cycle assessment (LCA) of the planned IPV products is performed based on the bill of material, yield and energy consumption.

The deliverable was achieved by performing a life cycle assessment (LCA) of the IPV products from the partners Freesuns, Voltec, Heliup and Etway. The report for the deliverable includes the results and the inventory data, for the shingled solar cells and the various modules materials and components for the different production steps of the module designs of the partners of the SPHINX project.

The deliverable is the first of two deliverables to determine the sustainability of the IPV products and represents an intermediate status before the final sustainability of the IPV products is assessed at the end of the SPHINX project.



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Project partners:

| # | Partner | Partner Full Name |
|-----|------------|--|
| | short name | |
| 1 | VOL | VOLTEC SOLAR |
| 2 | ETW | ETWAY S.R.L. |
| 3 | HLP | HELIUP |
| 4 | M10 | M10 INDUSTRIES AG |
| 5 | UNR | UNIRESEARCH BV |
| 6 | Fraunhofer | FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN |
| | | FORSCHUNG EV |
| 7 | ICARES | ICARES CONSULTING |
| 7.1 | ВІ | BECQUEREL INSTITUTE FRANCE |
| 8 | CEA | COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES |
| 9 | FSUNS | Freesuns SA |
| 10 | CSEM | CSEM CENTRE SUISSE D'ELECTRONIQUE ET DE MICROTECHNIQUE SA - |
| | | RECHERCHE ET DEVELOPPEMENT |
| 11 | EPFL | ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE |
| 12 | SOP | SOPREMA |

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