HORIZON EUROPE PROGRAMME

TOPIC HORIZON-CL5-2023-D3-01-02

GA No. 101136094

Sustainable Photovoltaics Integration in buildings and Infrastructure for multiple applications



SPHINX - Deliverable report

D2.3 – Exploitable results and exploitation routes





Deliverable No.	D2.3	
Related WP	2	
Deliverable Title	Exploitable results and exploitation routes	
Deliverable Date	30/04/2025	
Deliverable Type	Report	
Dissemination level	SEN - Sensitive	
Author(s)	Becquerel Institute	April
Checked by	All partners	April
Reviewed by	UNR	12/05/2025
Approved by	Mehdi Sahli (VOL)	13/05/2025
Status	Final	13/05/2025

Document History

Version	Date	Editing done by	Remarks
	10/03/2025	Juan Ignacio Martinez (BIE)	Draft 1
	09/05/2025	Juan Ignacio Martinez, Jose M.	Final draft
		Vega de Seoane (BIE), Adrien Van	
		Rechem (BI)	
	13/05/2025	Mehdi SAHLI (VOL)	Final review



Summary

This document (D2.3 – Exploitable results and exploitation routes) aims to provide a description of the status and next steps towards commercialisation of Sphinx innovations. It is a preamble in the development on specific exploitation plans for the results, which will be described in Deliverable 2.4. This report lists the Exploitable Results (ER), detailing value proposition, business vision and next steps for exploitation for each result. It is linked to T2.3.

The approach and methodology are described in Section 2, ER are described comprehensively in Section 3. A shortened version of the ER table is given below (Table 0.1).

Table 0.1 Initial categorization of ER

Category	Sub-category	ER Nr.	Owner	Exploitable result
Direct commercial	Product	ER1	CSEM	Front encapsulant with selective absorber/emitter components for UV protection and power boost
		ER2	CSEM	Coloured rear encapsulant with active component to reflect OR reemit the IR light spectrum to 1) boost the bifacial module power and 2) reduce the temperature behind the PV module
		ER4	CSEM	Anti-fouling and anti-glare coating for PV tiles
		ER5	Fraunhofer, M10	Matrix shingling for tiles for roof, façade and lightweight PV modules
		ER6	Fraunhofer	Edge passivation technology for shingles
		ER7	FSUNS	Matrix shingling PV tiles
		ER8	HLP	Matrix shingling lightweight modules
		ER9	ETW	Matrix shingling PV noise barrier
		ER10	VOL	Semi-transparent modules in carports
	Publication/So ftware	ER11	EPFL/CSEM	Centralized data storage portal to evaluate and compare performance of different IPV systems.
	Publication/Kn ow-how	ER3	Fraunhofer, M10	Chess patterned matrix shingling for semi-transparent bifacial modules
		ER12	Fraunhofer	Sustainable design identification using LCA
		ER13	ВІ	IPV sourcing strategies identification
Non- commercial		ER14	ВІ	BIPV/IPV market analysis followed by an assessment of European IPV market potential impacts
		ER17	BI, ALL	Guidelines/recommendations regarding prolonging lifetimes and facilitating repairability through legislation and policy
	Know-how	ER15	ВІ	Techno-economic assessment of IPV products and of various IPV use cases using manufactured IPV products
		ER16	BI, ALL	Technology development, go-to-market roadmaps in line with market constraints in order to support exploitation activities
		ER18	ВІ	Social acceptance parameters for IPV and guidelines to overcome barriers



4 Acknowledgement

The author(s) would like to thank the partners in the project for their valuable comments on previous drafts and for performing the review.

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

Disclaimer/ Acknowledgment



Copyright ©, all rights reserved. This document or any part thereof may not be made public or disclosed, copied or otherwise reproduced or used in any form or by any means, without prior permission in writing from the SPHINX Consortium. Neither the SPHINX Consortium nor any of its members, their officers, employees or agents shall be liable or responsible, in negligence or otherwise, for any loss, damage or

expense whatever sustained by any person as a result of the use, in any manner or form, of any knowledge, information or data contained in this document, or due to any inaccuracy, omission or error therein contained.

All Intellectual Property Rights, know-how and information provided by and/or arising from this document, such as designs, documentation, as well as preparatory material in that regard, is and shall remain the exclusive property of the SPHINX Consortium and any of its members or its licensors. Nothing contained in this document shall give, or shall be construed as giving, any right, title, ownership, interest, license or any other right in or to any IP, know-how and information.

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101136094. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.