

**PROJECT TITLE**

SOLAR-ERA.NET Cofund 2 Joint Call 2021\_FULLPROPOSAL TEMPLATE (call 8)

**TOPIC**

A - Advanced industrial PV technologies

**SUBTOPIC**

A1. Passivated emitter and rear cell (PERC), heterojunction (HJT) technologies and advanced passivating concepts for crystalline silicon solar cells, A9. Industry 4.0 (“smart factory”) approaches to advanced PV manufacturing

**PROJECT DURATION**

36 Months ( 09 / 2022 to 08 / 2025 )

**TOTAL REQUESTED FUNDING**

1,001,000 €

**TOTAL COSTS**

1,831,000 €

**CONSORTIUM**

P 1	Dr. Mrs Partner1 First name Partner1 Family name Partner1 Organisation/Institution/Company Partner1 Department	Partner1 Street, no., Partner1 P.O. box, Partner1 Zip/postal code Partner1 Town/city Austria	ptj-solar-eranet@fz-juelich.de Tel.: 0043 1234 Mobile: 0043 1234 Fax: 0043 1234
P 2	Mr. Partner2 First name Partner2 Family name Partner2 Organisation/Institution/Company Partner2 Department	Partner2 Street, no., Partner2 P.O. box, Partner2 Zip/postal code Partner2 Town/city Turkey	ptj-solar-eranet@fz-juelich.de Tel.: 0043 1234 Mobile: 0043 1234 Fax: 0043 1234

**CONSORTIUM (ASSOCIATED)**

P 3	Prof. Partner3 Associated First name Partner3 Associated Family name Partner3 Organisation/Institution/Company Partner3 Department	Partner3 Street, no., Partner3 P.O. box, Partner3 Zip/postal code Partner3 Town/city UK	ptj-solar-eranet@fz-juelich.de Tel.: 0043 1234 Mobile: 0043 1234 Fax: 0043 1234
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## KEYWORDS

### Supplementary keywords

Solar, ERANET, Call8

## A. PUBLISHABLE PROJECT SUMMARY

Please enter a short summary of your project here.

You have the opportunity to upload up to 5 images in sections A to J. All pictures need to be uploaded in section "image upload". To insert them, you enter the place marker "[[figureX]]" into your text (where the image should appear). By replacing the X with the number of the image you create the link to the image.

For example (Figure 1) is uploaded under images exist and can therefore be referenced here with the command.



Max file size: 600px x 600px, 2MByte Allowed formats are jpg, png or gif  
This information is required for submission. Max. 2000 characters.

## B. OBJECTIVES AND TARGETS

Scientific, technological and commercial objectives and challenge.

Give evidence relating to the scientific, technological and commercial objectives and challenges of the project, outlining:

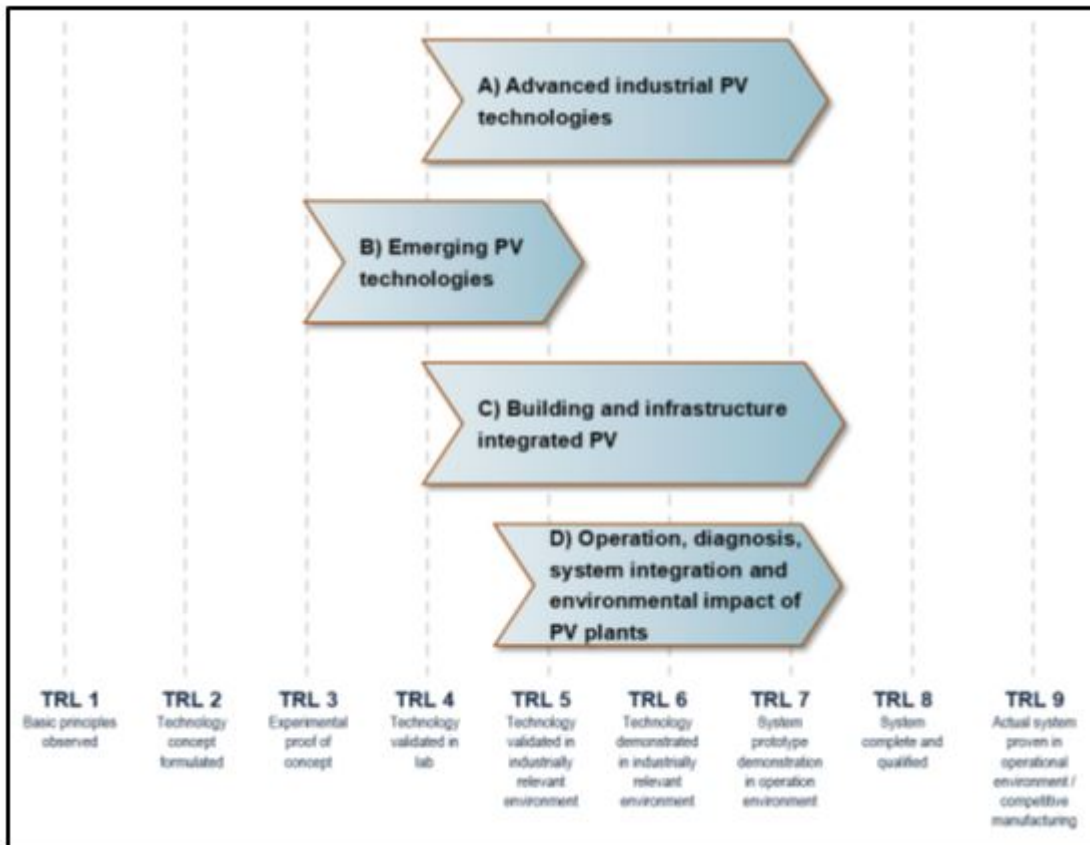
- Overall aims and objectives of the projects,
- Key Performance Indicators (see SET-Plan and related Implementation for PV) and relevant targets to be achieved in the project.
- Scientific, technical and commercial challenges

This information is required for submission.  
You have a maximum of 5.000 characters.

## C. EXPECTED RESULTS

Innovation or innovation potential, economic and environmental benefit, commercialization, major advantages / progress versus state of the art thanks to the project proposed, progress with respect to Technology Readiness Level (TRL) from start to end of project (according Horizon2020 terms), contribution to achieving the objectives of the SET-Plan.

The expected results can also be referenced by an image as shown in Figure 2:



This information is required for submission. You have a maximum of 10.000 characters.

## D. TECHNOLOGY READINESS LEVEL (TRL)

Give the TRL at the beginning and at the end of the project.

TRL 1 – basic principles observed

TRL 2 – technology concept formulated

TRL 3 – experimental proof of concept

TRL 4 – technology validated in lab

TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 – system prototype demonstration in operational environment

TRL 8 – system complete and qualified

TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

Max. 1.000 characters.

## E. DESCRIPTION OF PARTNERS

Give a short description of all partners involved and their role in the project:

- Founding year
- Number of employees
- Turnover in million Euros (MEUR) p.a.
- Qualification related to the project
- Role in the Project
- Additional information (optional)

This information is required for submission. You have an overall maximum of 5.000 characters.

## F. OUTLINE OF WORKPLAN

Please outline the following:

- Project structure
- Role of each partner
- relevant expertise, resources, manpower
- Monitoring and management of the project

The individual work package description with milestones and deliverables is requested in the section "Work packages".

Your data from the preproposal are transferred to section G. Work Packages.

This information is required for submission.

You have a maximum of 5.000 characters.

In Addition you have the possibility to upload tables in the section "Document upload"

## WORK PACKAGES

Table of Work Packages + Tasks

WP	Task	Start Month	End Month	WP / Task Title
1		1	36	Title of work package
	1.1	1	24	Title of task
	1.2	1	36	Title of task
2		15	30	Title of work package
	2.1	15	30	Title of task
	2.2	18	30	Title of task

WP/Task No.	WP Objectives + Description / Task Description	Partner (strong = Teamleader)	Person Month(s) (strong = Teamleader)
WP1	<p><b>Objectives:</b> Please give your main objectives for this work package in max. 1,000 characters.</p> <p><b>Description:</b> Describe your main objectives for this work package in max. 1,000 characters</p>	P1, P2, P3	5, 5, 1

<b>WP/Task No.</b>	<b>WP Objectives + Description / Task Description</b>	<b>Partner</b> (strong = Teamleader)	<b>Person Month(s)</b> (strong = Teamleader)
T1.1	<p><b>Description:</b></p> <p>Please give a description of the task . You have a maximum of 1,500 characters. In the following section, please give (1) the start and end project month, (2) person months per partner, involved in this project and state the project leader. Please note, that the person months can only be given in whole number (i.e. without decimals).</p>	P1, P2	4, 1
T1.2	<p><b>Description:</b></p> <p>Please give a description of the task . You have a maximum of 1,500 characters. In the following section, please give (1) the start and end project month, (2) person months per partner, involved in this project and state the project leader. Please note, that the person months can only be given in whole number (i.e. without decimals).</p>	P1, P2, P3	1, 4, 1
WP2	<p><b>Objectives:</b></p> <p>Please give your main objectives for this work package in max. 1,000 characters.</p> <p><b>Description:</b></p> <p>Describe your main objectives for this work package in max. 1,000 characters</p>	P1, P2, P3	7, 4, 1
T2.1	<p><b>Description:</b></p> <p>Please give a description of the task . You have a maximum of 1,500 characters. In the following section, please give (1) the start and end project month, (2) person months per partner, involved in this project and state the project leader. Please note, that the person months can only be given in whole number (i.e. without decimals).</p>	P1, P2, P3	3, 2, 1
T2.2	<p><b>Description:</b></p> <p>Please give a description of the task . You have a maximum of 1,500 characters. In the following section, please give (1) the start and end project month, (2) person months per partner, involved in this project and state the project leader. Please note, that the person months can only be given in whole number (i.e. without decimals).</p>	P1, P2	4, 2

### Table of Milestones

#### Milestone No. Month Milestone Title + Description

M1.1	30	<p><b>Title:</b></p> <p>Title of milestone</p> <p><b>Description:</b></p> <p>Please describe the milestones for each work package. You have a maximum of 1,000 characters. In the following section, please give the project month number, when the milestone will be reached.</p>
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## Table of Deliverables

### Deliverable No. Month Deliverable Title + Description

Deliverable No.	Month	Deliverable Title + Description
D1.1	24	<p><b>Title:</b></p> <p>Title of deliverable</p> <p><b>Description:</b></p> <p>Please give a short description of the deliverables for the work packages. You have a maximum of 1,000 characters for each deliverable. In the following section, please state the project month, when the deliverables should be met.</p>

# GANTT CHART

Name	Months	Duration	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Work package 1	Months 01 - 36	36 Months																																				
Task 1.1	Months 01 - 24	24 Months																																				
Task 1.2	Months 01 - 36	36 Months																																				
Milestone 1.1	Month 30	1 Month																																				
Deliverable 1.1	Month 24	1 Month																																				
Work package 2	Months 15 - 30	16 Months																																				
Task 2.1	Months 15 - 30	16 Months																																				
Task 2.2	Months 18 - 30	13 Months																																				

## H. TRANSNATIONAL AND ADDED VALUE

Please outline the Relevance to SOLAR-ERA.NET / SET-plan and Transnational Added Value:

- Relevance of the project to the SOLAR-ERA.NET topics
- Scientific/technical/industrial/commercial expertise of the consortium partners which is relevant for the success of the project
- Value of national subprojects
- Added value of transnational cooperation

This information is required for submission.

Your data from the preproposal are transferred to the full proposal. Please complete this section as required.

You have a maximum of 3000 characters.

## I. IMPACT OF PROJECT

The expected impact of the project on the different levels such as

- Expected contribution to the reduction in the cost of Solar power, life-cycle environmental impact and other relevant Key Performance Indicators
- Expected ability of the project to enhance innovation capacity and integration of new knowledge in the European solar power industry
- Future market deployment potential of the proposed innovation
- Project's ability to strengthen the competitiveness and growth of European companies by developing innovations that meet the needs of European and global solar power markets and, where relevant, deliver these innovations to the market;

This information is required for submission. You have an overall maximum of 10.000 characters.

## J. RISKS AND MITIGATION MEASURES

Qualitative risk register (including scientific/technology, management and commercial risks). Please outline for your project most relevant risks, their probability and severity, and preventive measures.

This information is required for submission. You have a maximum of 2000 characters.

## K. SIMILAR PROPOSALS IN OTHER FUNDING SCHEMES

Please outline whether the full project, or parts of it, have been submitted to other funding schemes as a full proposal. If so, state the funding scheme and what the outcome was.

This information is required for submission.

You have a maximum of 1500 characters.



## L. STATUS OF CONSORTIUM AGREEMENT

Please give a brief comment to the actual state of the consortium agreement. Include whether the consortium agreement is at the initial or final draft stage or in the process of being signed. Give an indication as to the expected date of agreement signature.

This information is required for submission.

You have a maximum of 1.000 characters.

## M. ADDITIONAL INFORMATION

This information is not transferred from the preproposal and is optional.

Further additional information relating to the project can be added here.

Additional information such as technical drawings, diagrams, charts etc. can be uploaded in the respective field "Image Upload".

You have a maximum of 5000 characters.

# FINANCES

## Requested funding

Organisation name	Personnel	Travel	Consumables / Equipment	Subcontracts	Other	Requested Funding	Total Own Contribution	Total Costs
Partner1 Organisation/Institution/Company	400,000	6,000	120,000	20,000	5,000	561,000	350,000	911,000
Overhead	10,000	0	0	0	0			
Partner2 Organisation/Institution/Company	300,000	5,000	100,000	0	25,000	440,000	430,000	870,000
Overhead	10,000	0	0	0	0			
Partner3 Organisation/Institution/Company	0	0	0	0	0	0	50,000	50,000
Overhead	0	0	0	0	0			
<b>TOTAL</b>	<b>720,000</b>	<b>11,000</b>	<b>220,000</b>	<b>20,000</b>	<b>30,000</b>	<b>1,001,000</b>	<b>830,000</b>	<b>1,831,000</b>

Own contribution

Organisation name	Personnel	Travel	Consumables / Equipment	Subcontracts	Other	Total Own Contribution
Partner1 Organisation/Institution/Company	200,000	5,000	120,000	20,000	5,000	350,000
Partner2 Organisation/Institution/Company	300,000	5,000	100,000	0	25,000	430,000
Partner3 Organisation/Institution/Company	0	0	0	0	50,000	50,000
TOTAL	500,000	10,000	220,000	20,000	80,000	830,000

# PARTNER DATA

Partner 1 (Consortium Coordinator): Partner1  
Organisation/Institution/Company

## FINANCE COMMENTS

<b>Personnel</b>	For all Finance Comments: Brief Description (max. 1000 characters) Put number of person-months and average monthly salary (incl. social expenses) in "Description". Overhead: To be specified according to the national / regional rules (some do not ask for separate overhead costs as they are part of personnel costs). Further information can be found in the Guidelines for Proposers under "Annex – National and Regional Requirements" and / or obtained from the respective contact Points.
<b>Travel</b>	Travel & subsistence costs according to national / regional rules. max. 1000 characters.
<b>Consumables / Equipment</b>	Describe the equipment needed specifically for the project and the materials to be procured specifically for the project. Example equipment: measurement device xy, required for doing special analysis, overall costs of 80.000 €. max. 1000 characters
<b>Subcontracts</b>	Describe the sub-contract for the task that cannot be carried out by the project consortium and its particular relevance for the project. Max. 1000 characters.
<b>Other</b>	E.g. conference fees for dissemination activities specifically related to the project. Max. 1000 characters

## ADDITIONAL INFORMATION

### ADDITIONAL FIELDS

<b>Registration/VAT PIC number</b>	Registration/VAT
<b>Confirm that the information given in this proposal is correct.</b>	yes
<b>Confirm that the proposal is endorsed by all project partners.</b>	yes
<b>Confirm that all partners have contacted and appropriately informed their funding agencies on the project.</b>	yes

Partner 2: Partner2 Organisation/Institution/Company

## FINANCE COMMENTS

<b>Personnel</b>	See comments under information of coordinator
<b>Travel</b>	See comments under information of coordinator
<b>Consumables / Equipment</b>	See comments under information of coordinator
<b>Subcontracts</b>	See comments under information of coordinator
<b>Other</b>	See comments under information of coordinator

## ADDITIONAL INFORMATION

### ADDITIONAL FIELDS

<b>Registration/VAT PIC number</b>	Registration/VAT
<b>Confirm that the information given in this proposal is correct.</b>	yes

Partner 3: Partner3 Organisation/Institution/Company

### FINANCE COMMENTS

<b>Personnel</b>	
<b>Travel</b>	
<b>Consumables / Equipment</b>	
<b>Subcontracts</b>	
<b>Other</b>	The associated partner has a own contribution of 50.000 EUR.

## ADDITIONAL INFORMATION

Partner 3 will participate as an associated partner. He will provide PV Modules for experiments.

### ADDITIONAL FIELDS

<b>Registration/VAT PIC number</b>	
<b>Confirm that the information given in this proposal is correct.</b>	yes

**Additional  
Information  
attached as  
a PDF**

Page 1

Page2