

Date: **02.11.2021 PREPROPOSAL**

PROJECT TITLE

SOLAR-ERA.NET Cofund 2 Joint Call 2021_PREPROPOSAL 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

TOTAL REQUESTED FUNDING

TOTAL COSTS

36 Months (09 / 2022 to 08 / 2025)

601002€

1431002 €

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

KEYWORDS

Supplementary keywords

Solar, ERANET, Call8

A. 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: $600px \times 600px$, 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

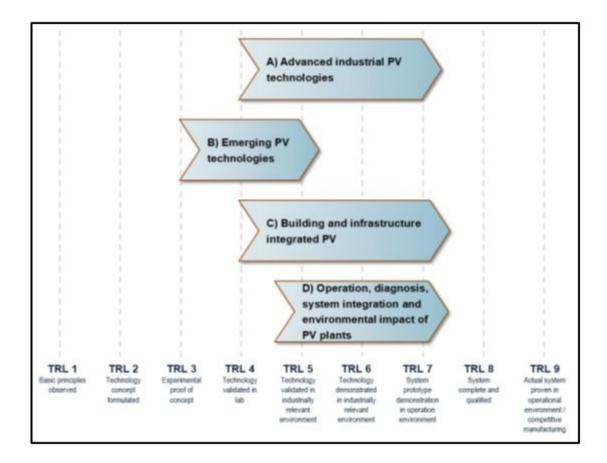
This information is required for submission.

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.

Max. 100 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 elaborate the work plan of the project, for example:

The project is structured into 6 work packages (WP) and coordinated in WP1. First, the individual processes for passivating (WP2), metallization (WP3) and active light absorption layers (WP4) are to be developed and then integrated into a solar cell process (WP5). Finally, the optimized solar cell process is to be integrated into module production (WP6).

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

G. TRANSNATIONAL AND ADDED VALUE

Clear definition and value for both each national / regional subproject and added value through transnational cooperation for the whole project.

This information is required for Submission.

You have a maximum of 3,000 characters.

H. 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.

I. RISKS AND MITIGATION MEASURES

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

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

J. SIMILAR PROPOSALS IN OTHER FUNDING SCHEMES

Please indicate if similar proposals have been admitted/funded in other schemes. Please elaborate on the similirities and differences between the projects.

Max. 1500 characters.

FINANCES

Requested funding

| Organisation name | Personnel | Travel | Consumables / Equipment | Subcontracts | Other | Requested Funding | Total Own Contribution | Total Costs |
|--|-----------|--------|----------------------------|--------------|-------|-------------------|---------------------------|-------------|
| Partner1 Organisation/Institution/Company | 2 | 6000 | 120000 | 20000 | 5000 | 161002 | 350000 | 511002 |
| Overhead | 10000 | 0 | 0 | 0 | 0 | | | |
| Partner2 Organisation/Institution/Company | 300000 | 5000 | 100000 | 0 | 25000 | 440000 | 430000 | 870000 |
| Overhead | 10000 | 0 | 0 | 0 | 0 | | | |
| Partner3 Organisation/Institution/Company | 0 | 0 | 0 | 0 | 0 | 0 | 50000 | 50000 |
| Overhead | 0 | 0 | 0 | 0 | 0 | | | |
| TOTAL | 320002 | 11000 | 220000 | 20000 | 30000 | 601002 | 830000 | 1431002 |

Own contribution

| Organisation name | Personnel | Travel | Consumables / Equipment | Subcontracts | Other | Total Own Contribution |
|--|-----------|--------|----------------------------|--------------|-------|------------------------|
| Partner1 Organisation/Institution/Company | 200000 | 5000 | 120000 | 20000 | 5000 | 350000 |
| Partner2 Organisation/Institution/Company | 300000 | 5000 | 100000 | 0 | 25000 | 430000 |
| Partner3 Organisation/Institution/Company | 0 | 0 | 0 | 0 | 50000 | 50000 |
| TOTAL | 500000 | 10000 | 220000 | 20000 | 80000 | 830000 |

PARTNER DATA

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

FINANCE COMMENTS

| Personnel | 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. |
|-------------------------|---|
| Travel | Travel & subsistence costs according to national / regional rules. max. 1000 characters. |
| Consumables / Equipment | 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 |
| Subcontracts | 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. |
| Other | E.g. conference fees for dissemination activities specifically related to the project. Max. 1000 characters |

ADDITIONAL INFORMATION

ADDITIONAL FIELDS

| Registration/VAT7 PIC number | Registration/VAT |
|--|------------------|
| Confirm that the information given in this proposal is correct. | yes |
| Confirm that the proposal is endorsed by all project partners. | yes |
| Confirm that all partners have contacted and appropriately informed their funding agencies on the project. | yes |

Partner 2: Partner2 Organisation/Institution/Company

FINANCE COMMENTS

| Personnel | See comments under information of coordinator |
|-------------------------|---|
| Travel | See comments under information of coordinator |
| Consumables / Equipment | See comments under information of coordinator |
| Subcontracts | See comments under information of coordinator |
| Other | See comments under information of coordinator |

ADDITIONAL INFORMATION

ADDITIONAL FIELDS

| Registration/VAT7 PIC number | Registration/VAT |
|---|------------------|
| Confirm that the information given in this proposal is correct. | yes |

Partner 3: Partner3 Organisation/Institution/Company

FINANCE COMMENTS

| Personnel | |
|-------------------------|--|
| Travel | |
| Consumables / Equipment | |
| Subcontracts | |
| Other | 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

| Registration/VAT7 PIC number | |
|---|-----|
| Confirm that the information given in this proposal is correct. | yes |