



**ARTIFICIAL
PHOTOSYNTHESIS:
FUEL FROM THE SUN**

**EIC HORIZON
prize**

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PRIZE APPLICATION TEMPLATE

Application (Part B)

6 December 2017

Please follow the structure of this template when preparing your entry. It has been designed to ensure that the important aspects of your work are presented in a way that will enable the experts to make an effective assessment against the evaluation criteria.

Page limits: Part B should not be longer than 150 pages. You might be also asked to provide additional documentation during an onsite visit. Supporting documents such as tables, data sets, drawings, pictures and other clarifications that can be used when quantifying the results of the suggested solution in terms of key performance metrics can be provided as an annex and do not count towards the 150 page limitation.

The page limit will be applied automatically; therefore you must remove this instruction page before submitting.

If you attempt to upload a proposal longer than the specified limit before the deadline, you will receive an automatic warning and will be advised to shorten and re-upload the proposal. After the deadline, excess pages (in over-long proposals/applications) will be automatically made invisible, and will not be taken into consideration by the experts. The proposal is a self-contained document. Experts will be instructed to ignore hyperlinks to information that is specifically designed to expand the proposal, thus circumventing the page limit.

Please respect the page limit and do not take it as a target either! It is in your interest to keep your text as concise as possible, since experts rarely view unnecessarily long entries in a positive light.

The following formatting conditions apply.

For Part B the font allowed is Times New Roman and the minimum font size allowed is 11 points. The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).

The reference font for the body text of H2020 proposals is Times New Roman (Windows platforms), Times/Times New Roman (Apple platforms) or Nimbus Roman No. 9 L (Linux distributions).

The use of a different font for the body text is not advised and is subject to the cumulative conditions that the font is legible and that its use does not significantly shorten the representation of the proposal in number of pages compared to using the reference font (for example with a view to bypass the page limit).

The minimum font size allowed is 11 points. Standard character spacing and a minimum of single line spacing is to be used.

Text elements other than the body text, such as headers, foot/end notes, captions, formula's, may deviate, but must be legible.

The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).

COVER PAGE

Title of the application

Acronym of the application

List of contestant(s)

Contestant No *	Contestant organisation name	Country
1 (Lead Contestant)		
2		
3		
...		

* Please use the same numbering as that used in the administrative application forms (Part A).

Table of Contents

1. OVERVIEW OF THE APPLICATION

1.1. The project team

Describe qualitatively the team that implemented the project.

1.2. The project

Describe the overall project, the main ideas, concept and assumptions involved. Explain the innovativeness of the solution.

2. DETAILED DESCRIPTION OF THE DEVICE

The devices constructed in pursuit of the prize aim must show that they can perform against several key technical criteria in terms of conversion of sunlight into storable and transportable fuel. The description and the data to be provided in the application must provide clear information and substantiated data related to each criterion. It must in sufficient details so that the device, its performance and its commercial and market potentials can be easily and undoubtedly assessed by the judges.

The application will provide information and data to assess the following award criteria:

1. Degree of system integration from light capture to fuel production (max. 30 points)
2. Device/system performance (max. 25 points)
3. Production of fuel that will be used in an engine (max. 25 points)
4. Widest market potential (max. 10 points)
5. Commercial potential of the device (max. 10 points)

The criteria, "Production of fuel that will be used in an engine", will be judged during the Grand Final. These criteria are described in the Rules of Contest of the prize.

Provide detailed descriptions of the methods and measurement techniques employed in assessing technical ability, acknowledging internationally agreed standards and noting the measurement methods and equipment employed.

2.1. Device description

Provide an overview description of the device including physical dimension, operation principle and experimental results.

2.2. Methods and measurement techniques

Provide detailed descriptions of the methods and measurement techniques employed in assessing technical ability, acknowledging internationally agreed standards and noting the measurement methods and equipment employed.

2.3. Degree of system integration from light capture to fuel production

Provide the information and data needed to judge the criteria as described the Rules of Contest. The criteria will judge the technical ability in terms of integrity, durability, and novelty.

2.4. Device/system performance

Provide the information and data needed to judge the criteria as described the Rules of Contest. The criteria will judge the technical ability in terms of efficacy and efficiency.

2.5. Production of fuel that will be used in an engine

Provide the information and the data needed to judge the autonomous operation of the device developed against the test requirements for the Grand Final.

2.6. Widest market potential

Provide the information and data needed to judge the criteria as described the Rules of Contest. The criteria will judge the sustainability of the device to show its widest potential.

2.7. Commercial potential of the device

Provide the information and data needed to judge the criteria as described the Rules of Contest. The criteria will judge the commercialisation of the technological innovations made and the capacity to further exploit the device.