

# solar decathlon<sup>23</sup> europe

**BUCHAREST ROMANIA** *Build. Connect. Live!*

# call for teams

21 \_ 06 \_ 2021



energy endeavour  
FOUNDATION

GOVERNING BODY OF THE SOLAR DECATHLON EUROPE

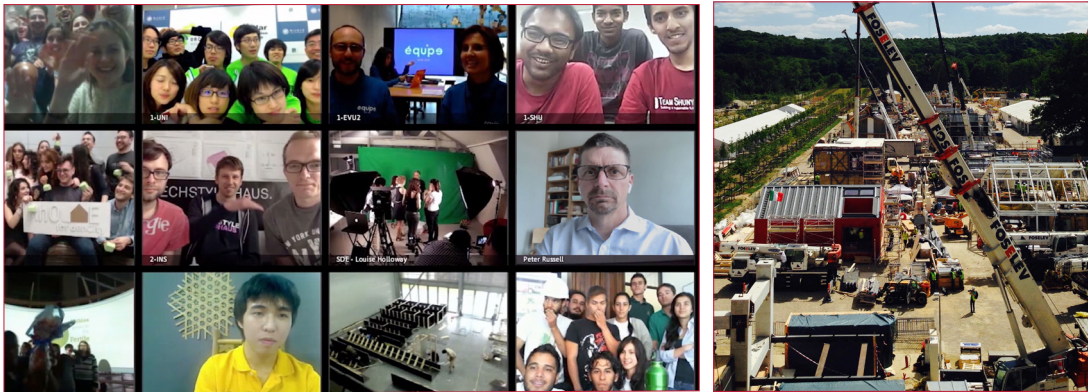


EFdeN  
where N is nature

SOLAR DECATHLON EUROPE 2023 HOST CITY EXECUTIVES

# solar decathlon europe 23

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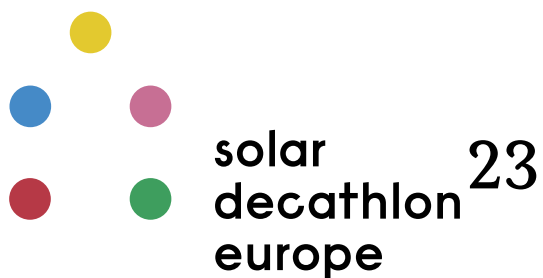


solar  
deathlon<sup>23</sup>  
europe

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join us in bucharest!

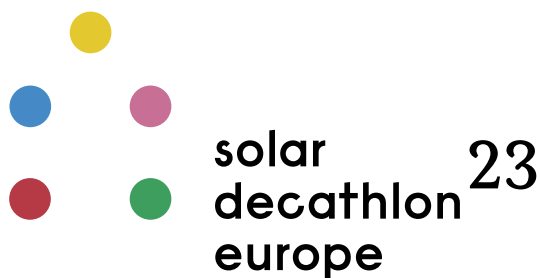




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## I\_ sde at a glance

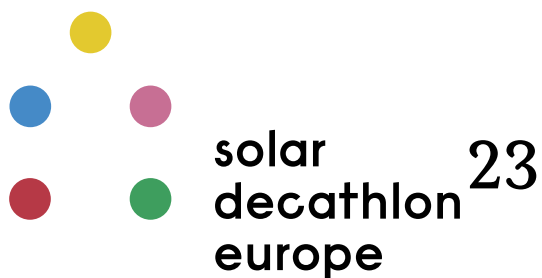
**INTRO** Initiated in 2002 by the United States Department of Energy, the Solar Decathlon is a university-level Competition for resource-responsible and energy-efficient architecture and engineering. Targeting clean-energy workforce and building sectors, approximately twenty student Teams compete in the design, construction and management of innovative dwellings powered by renewable energy. The prototype houses are brought to the Competition site and assembled in approximately fourteen days. The site becomes an open forum and exhibition, where the houses are operated, demonstrated to the public, and evaluated by a jury of renowned international adjudicators.

### I.1 contests & scope

**FORMAT** The Competition is structured around ten contests. These are either measured (i.e. Energy Performance) or juried (i.e. Architecture). The results of the ten contests are calculated, thus determining the overall winner. The contests reflect the emphasis on cross-disciplinary academic education celebrating a great variety of disciplines at the participating universities. The SDE Competition event stimulates research and design challenges of the Teams' universities; importantly, the singular learning-by-doing experience provides all stakeholders with opportunities that go beyond the scope of the academic forum, and bolster post-Competition clean energy workforces.

**INTERNATIONAL** The Solar Decathlon has been hosted in the United States ten times, most recently in 2021. The Competition has also been held beyond the United States, with chapters in Europe (2010, 2012, 2014, 2019); China (2013, 2018); Latin America and Caribbean (2015, 2019); and the Middle East (2018). Further Competitions are planned in Europe (2021, postponed to 2022; and 2023); India (2021); the Middle East (2020, postponed to 2021); China (2021); and Latin America and Caribbean (2022).

**SDE DIVERSITY** While all editions of the Solar Decathlon Europe are international in breadth, and scope, each celebrates the diverse cultural, historical, and geographic attributes of the Host City's country. The SDE Competition is a public event, attracting broad, multi-cultural, multi-generational audiences from neighbouring European countries and beyond. Importantly, the SDE prides itself on the singularity of hosting its various editions in a multinational context. From Spain, then France, to Hungary, Germany, and, now, to Romania, the Solar Decathlon Europe is indeed an exemplary model of key European values: freedom, sustainable development, social inclusion and equality, and Europe's inestimable cultural and linguistic diversity.



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#### **SDE23 INTRO**

The SDE23 edition will be hosted right in the heart of Bucharest, Romania, and will focus on the new normal, which leans on the multiple facets of everyday living in our homes, habitats, and communities. This SDE23 edition will take into consideration the changing nature of our lifestyles, especially as we adapt to a post-pandemic world.

#### **1.2 sde organisation**

The SDE23 Organisation is composed of the Energy Endeavour Foundation, and the SDE23 Host City Executives (from the Asociatia Solar Decathlon Bucuresti, otherwise known as EFdeN). The two entities will share their collective expertise, forming a dream team that is eagerly collaborating to prepare the SDE23 in Bucharest, Romania.

#### **EEF**

#### **1.3 governing body**

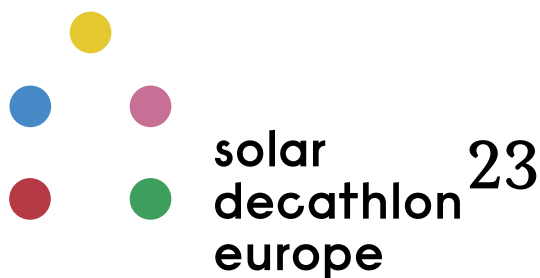
The Solar Decathlon Europe (SDE) is governed by the Energy Endeavour Foundation (EEF). A Netherlands-based non-profit business entity, the EEF is endorsed by the U.S. Department of Energy (DOE) to steward the SDE. Custodian of the SDE Rules and SDE brand, the EEF produces the European-wide SDE Call for Cities and its corresponding international SDE Call for Teams. Providing strategic SDE guidance, tools, systems, networks, data, branding, project advisory, support, and administration, the EEF transfers project-specific knowledge and expertise to SDE Host City Executives, working collaboratively to ensure the continuity of the Solar Decathlon Europe, from one edition to the next. The Energy Endeavour Foundation provides the structure and framework for the future of the SDE.

#### **EFdeN**

#### **1.4 host city executives**

Asociatia Solar Decathlon Bucuresti (EFdeN) is the engine behind Bucharest's SDE legacy involvement. Having participated in previous SD editions in Europe and the Middle East, SDE23 Host City Executives have invested vibrant and relentless energy in the Solar Decathlon and its values. Asociatia Solar Decathlon Bucuresti / EFdeN is the designated winner of the pan-European SDE23 Call for Cities, as directed by the Energy Endeavour Foundation.





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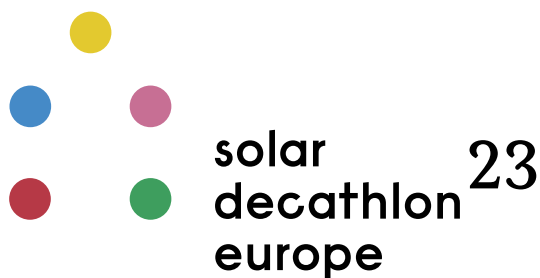
## 1.5 actions & audiences

### SDE OBJECTIVES

The SDE23 Organisation's (EEF & SDE23 Host City Executives) ultimate goal is to stimulate viable solutions for our evolving built environment, both rural & urban, and for our ever-important energy systems, supporting the Solar Decathlon Europe's key objectives, as described below.

- **Raise awareness of participating students** on the benefits and opportunities in renewable energies and sustainable construction, challenging them to think creatively in the development of innovative solutions that contribute to energy savings;
- **Engage children**, the future generation, in the environmental impact resulting from our comfort conditions, inciting them toward STEAM educational curriculae;
- **Encourage planners and professionals** in the building industry to select materials and systems that reduce the environmental impact of a building over its entire lifetime, optimising its economic viability and providing comfort and safety of occupants;
- **Stimulate workforce opportunities** triggered through academia, research and industry;
- **Educate the general public** on responsible energy use, renewable energy, energy efficiency and available technologies to help reduce energy consumption;
- **Emphasise a correct order of intervention**: first, reducing building energy consumption and increasing its energy efficiency, and integrating active solar systems and other renewable technologies. Emphasis is placed on building systems that are selected and dimensioned using environmental and cost-effective criteria;
- **Promote the use of solar technologies**, including architecturally attractive solar system integration, while using solar technologies to replace conventional construction materials in the building envelope such as those used for roof, skylights, or facades;
- **Demonstrate** that high performance solar dwellings can be accessible, and affordable, without sacrificing comfort and style;
- **Bolster European legislation** and the renovation movement by facilitating the transition towards NZEB, including the general alignment of a green legislation.

An in-depth overview of all European, and other, international SD chapters is accessible through the recently developed Solar Decathlon Knowledge Platform: <https://building-competition.org>.



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## 1.6 solar decathlon europe goals pursued in bucharest

### SDE BUCHAREST

A continued and long-range goal of the Solar Decathlon Europe project is the development and demonstration of cost-effective, energy efficient, solar-powered dwellings. The Energy Endeavour Foundation, with the designated SDE23 Host City, Bucharest, Romania, is soliciting Team proposals from post-secondary educational institutions that wish to participate in the Competition. These Decathlete Teams will incorporate academic research and development (R&D) within their educational programmes and beyond, toward broad audiences and the ultimate SDE goals.

The SDE23 edition in Romania provides a forum for the development of SDE values and corresponding project requirements, reflected in the new set of Rules. These are intended to address us all, citizens who meet a crucial challenge: to develop our society through climate protection and the sustainable use of resources. As such, the evaluation of the proposed projects, through the ten Competition contests, addresses the vital issues related to our dwellings of the immediate future, as well as long term solutions which consider environmental protection.

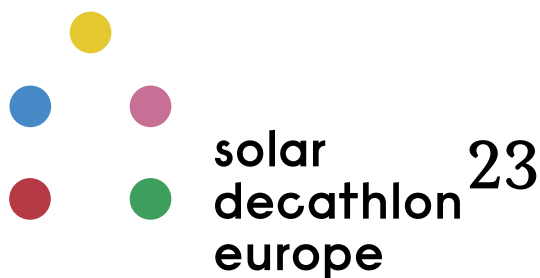
### LIKE-MINDED

The Solar Decathlon Europe's broad audience includes university student Teams, our future clean-energy professionals from the fields of architecture, engineering, economics, technology, and communication; active professionals in corresponding sectors and fields; the building industry, particularly sustainable and clean energy industries; homeowners, general civil society and public consumers; policy-makers; and, of course, our ever-important children and youth. **The SDE Decathlete Teams pursue multi-disciplinary approaches to the design, building, and operation of energy-efficient, solar-powered dwellings. Stimulating solutions for connected living and climate protection in contexts from urban to rural are the focal points of the SDE23 edition.** The programme is a technology showcase, educating broad audiences on the benefits, affordability, and availability of clean energy research and innovative solutions through demonstrations, tours, public presentations, media coverage, and digital outreach serving as tools to amplify this message.

### SDE23 ORG

The SDE23 Organisation, a collaboration composed of the Energy Endeavour Foundation (EEF) and the SDE23 Host City Executives from the Asociatia Solar Decathlon Bucuresti (otherwise known as EFdeN), is eagerly preparing the SDE23 in Bucharest. With extensive and continued focus on technological innovation in construction, and for environmental protection challenges, the SDE23 edition is already enjoying local support from ENGIE as well as from the Romanian Ministry of Environment, Water and Forests.





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#### GET ON BOARD

With this Call for Teams, the SDE23 Organisation (EEF & SDE23 Host City Executives) will select approximately 20 university Teams to participate in the SDE23, through this competitive and international Call for Teams, and its corresponding jury evaluation. The ability and plan to obtain sponsorships and Team support is a part of the evaluation, selection criteria, and programme policy for this Call for Teams. The challenge to the Teams competing in the SDE23 is to safely and effectively design, build and operate solar-powered dwellings that are cost-effective, energy-efficient and attractive, in less than 24 months.

#### 1.7 sde23 rules

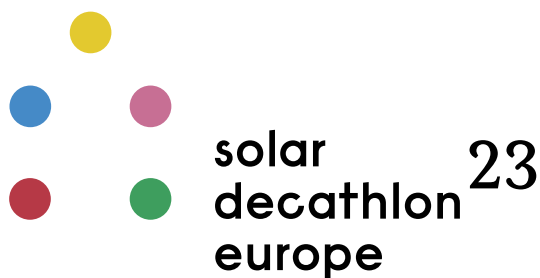
The SDE23 Rules are the basis for the Competition. These will be revised preceding the Competition event based on the evolving nature of lessons learned through the project phases, and those learned through other worldwide SD chapters. This Call for Teams document will provide the fundamental principles regarding the specificity of the SDE23 edition in Bucharest, Romania. Any updated versions of the SDE23 Rules will be aligned to reflect this specificity. A preliminary reference version of the SDE23 Rules has been published with this SDE23 Call for Teams, posted on the SDE Website in June 2021 ([version 1.0R of the SDE Rules](#))

**Please note: The official language for the SDE23 Competition is English.**

## 2\_ the sde23 profile\_ build. connect. live!

#### SDE23 THEMES

The upcoming Solar Decathlon Europe 2023 (SDE23) will take place in September 2023, in Bucharest, Romania. A key objective in this SDE edition is to further connect the Competition to current architectural discussions, to the continued and evolving topics in building research, and to the varied social aspects of our built environment. In a society challenged with increasing urbanisation, shifting geopolitical balances, and impoverishing natural habitats, we have the interesting opportunity to reimagine our ways of living. We live in an inextricably interconnected global community, dependent on fast and reliable means of communication, both verbal and physical... a 'place', where contour lines can be blurred and blended, where someone working on one side of the planet can have a positive and meaningful impact on a community several thousands of kilometres away.



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## 2.1 solar decathlon europe 2023\_ actions shaping tomorrow

### CONNECTION

The Solar Decathlon Europe calls eager future professionals to rethink the status quo. The Solar Decathlon Europe 2023 is asking you: what is, what will be, the shape of our connected living? What does it mean to be connected? What are our priorities? How can we be intelligently, comfortably, interconnected in our human habitat? The recent pandemic has pushed us to rethink the value of our surrounding environments. We saw nature re-integrate with our silent cities, while we felt a sense of surreal isolation resulting from the shutdown of live social interaction. We asked ourselves: how to gratefully connect the natural and built environment so that these can work in synergy? Many translated commuting hours to quiet moments and spaces for alternative downtime or concentration. We reorganised our homes for our new needs. What if our living spaces were more flexible, better enhanced, and adapted to our needs, our lives? Can we imagine a cross-pollination of solutions to respond to broad audiences? Some of us rediscovered smaller towns, villages and rural environments; others recognised the need for buzzing, lively, healthy urban habitats. How do we reimagine our living environments?

## 2.2 the house & contexts of reference

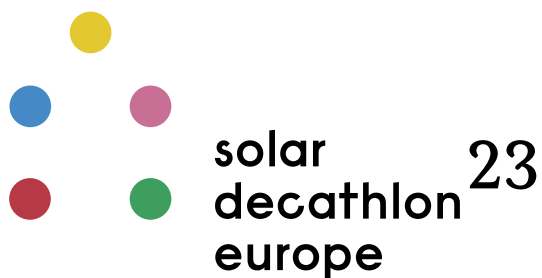
### CONTEXTUALISATION

The SDE23 theme 'Build. Connect. Live!' encourages the spectrum of proposals intended for the contrasting and varied environments from the Teams' different communities of choice or of origin. Teams are challenged to demonstrate how their house, or 'Living Demonstration Unit' (LDU) enables their specific concept of connected living. Teams will be invited to build full-scale functional prototypes in Bucharest intended for their community of choice or origin, while demonstrating how we can build, connect, and live in today's ever-changing built environment. The houses will represent the weaving of well-integrated, innovative, technical, and technological solutions into healthy and flexible living spaces.

### CONTEXTUAL BUILT ENVIRONMENT

The challenge of contextualising the project at all the relevant scales is primordial. Regardless of the location, a project is identified by its position and role within its community and environment. Team projects will consider the differing scales of contextualisation in a built environment: from the levels of city block, neighbourhood, suburb, town, and hamlet to broader regional scales.

Teams are free to investigate and propose the direction of their choice from different types of habitation: from collective housing in dense urban contexts, to the grouping of individual houses generating cohesive communities in less dense areas. Projects will consider the way in which the building functions and interacts within the community and neighbouring environment. This emphasis on contextualisation helps to bolster the valuable links between the SDE23 project locations and their corresponding human, logistic, communicative, and technological connections.



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#### MORE ON CONNECT

##### CONNECTED LIVING & COMMUNICATION

The SDE23 Organisation seeks to investigate different modes of socialisation and community organisation, while respecting the various building landscapes chosen by Teams (dense urban context, or disparate individual houses). Teams are invited to articulate mobility strategies and the corresponding economic viability associated to their project. Importantly, the SDE23 Competition seeks to inform and empower broad audiences, specific stakeholder groups, and the public at large.

Climate-change adapted construction, energy-efficient city renewal, and broad participation of citizens are key European ambitions in bringing sustainability mainstream. The SDE23 Organisation expects Teams to take part in multi-channel awareness actions and dissemination, while adapting their language to various, and broad, audiences. The target groups include multi-level government bodies, industry partners, investors, professionals, academia, and the general public, and, importantly, our children and youth. Workshops and energy-literacy strategies will be transmitted by the SDE23 Organisation, which will steward the Decathlete Teams accordingly through the SDE23 project.

#### SUSTAINABILITY & RESILIENCE

##### ADAPTABILITY IN SITU

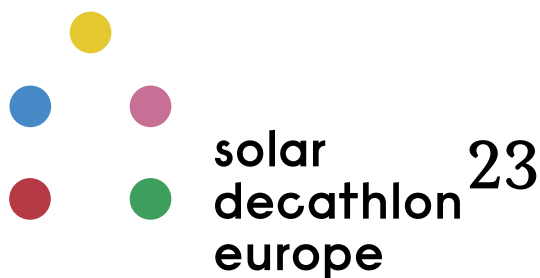
Another important SDE23 goal is to highlight the skillful and the environmental sensibility of the Teams' project (house design, techniques, systems and components) to attain the maximum reduction of negative environmental impact during the house components' manufacturing, the construction phase, the building's lifespan, and its disassembly. The Teams should also display their ability to prepare and plan for, absorb, recover, and successfully adapt to adverse circumstances they might have to face, such as climate-change uncertainty, environmental degradation, population growth, migration, and pandemics.

#### CLIMATE CONSCIOUS DESIGN

##### CLIMATE PROTECTION

In a changing climate at a global level, Teams are encouraged to take energy efficiency to the level of tackling extremes, integrating a 'climate conscious design' concept into their design.





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### 3D DESIGN & MODELLING

**BIM** The utilisation of 3D-modelling techniques and harmonised information management are mandatory during all phases of project, including Deliverables produced before the assembly phase. The projects are expected to demonstrate state-of-the art design through 3D and building information modelling (BIM). Innovative measures such as simulation (building performance) and / or animated virtual reality are encouraged, especially to illustrate the design of the entire building in context.

### TAKING IT FURTHER

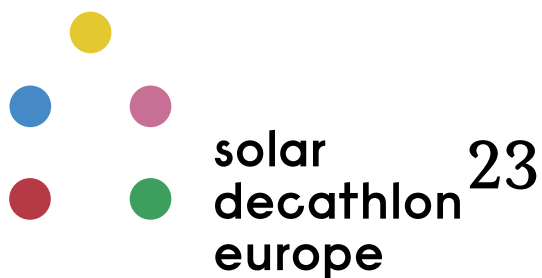
**HEALTHY HOMES** The SDE23 Competition will place emphasis on the topic of healthy homes. Considerations such as transitional and exterior spaces, natural lighting, cross-ventilation, and air quality are integral aspects in the pursuit of human-centric housing, universal design, and a future-proof habitat.

### EUROPEAN DIRECTIVES

**EUROPEAN POLICY** Lowering energy consumption on one hand, while increasing the share of renewable energy on the other, requires a fundamental transformation of energy systems. Approximately 46% of the final energy consumption in the EU is used for heating and cooling purposes; the EU has proposed a new EU Climate and Energy Framework for the 2021 to 2030 period. This new policy challenges countries to reduce the GHG emission by at least 40% (compared to 1990 levels) by 2030. The EU aims to be climate-neutral by 2050, with an economy with net-zero greenhouse gas emissions. As this trend must be put into practice, the SDE23 encourages students, professionals, academics and industry to pursue and go beyond this challenge.  
[https://ec.europa.eu/clima/policies/strategies/2050\\_en](https://ec.europa.eu/clima/policies/strategies/2050_en)

### SUSTAINABLE DEVELOPMENT GOALS

**UNITED NATIONS  
SDG** The United Nations Sustainable Development Goals (SDG) are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice. Goal eleven asks that we make cities and human settlements inclusive, safe, resilient and sustainable. There needs to be a future in which cities provide opportunities for all, with access to basic services, energy, housing, transportation and more.



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### 2.3 one project \_ ten contests

The SDE23 Competition format features are maintained through approximately 20 university Teams, ten contests, specific assembly and contest periods, lasting approximately sixteen days, including public exhibitions, jury evaluations, and awards ceremonies. The Competition will be held between August and September of 2023. This SDE23 Competition event is a call to action, where the natural and built environment are interconnected to work in synergy.

#### TIGHT TESTS

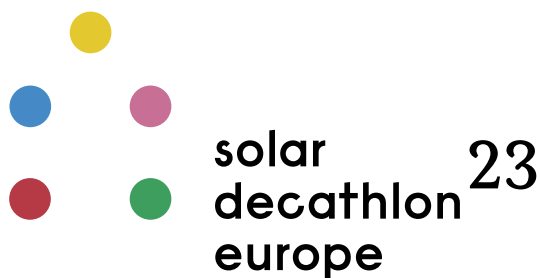
The ten Competition contests consist of several sub-contests with varying assessment criteria; these contests are either measured, or scored by expert juries. The Team with the highest total of combined points wins the overall Competition. The SDE23 presents the combined challenge of simultaneously addressing societal topics; local and / or regional contextualisation; architectural design; and measured building performance. Each Team will decide whether to design a new housing concept from scratch, or to act through retrofitting on existing buildings.

### 2.4 contests & sde23 specificity

While the ten contests for the SDE23 Competition build further on the core SDE legacy themes (design, communication, science, innovation and humanity) they have evolved to highlight new challenges, in keeping with the specificity of the SDE23.

**The ten SDE23 contests are as follows:**

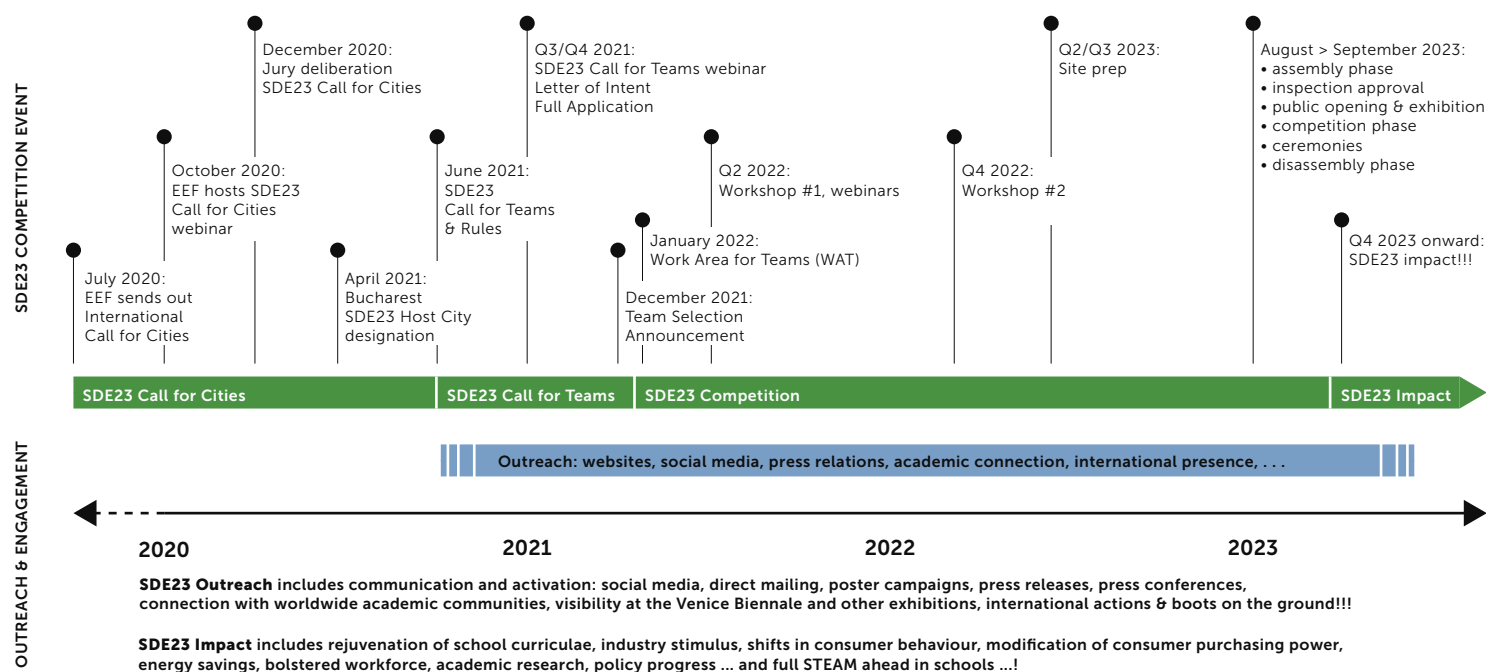
- **Architecture**
- **Engineering & Construction**
- **Energy Efficiency**
- **Electrical Energy Performance**
- **Comfort Conditions**
- **House Functioning**
- **Communication & Social Awareness**
- **Connected Living & Affordability**
- **Innovation**
- **Sustainability**



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## 2.5 SDE23 timeline

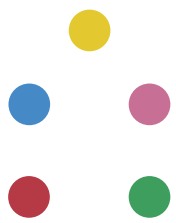
The SDE23 project kicks-off with this Call for Teams, builds up to the SDE23 event scheduled for August - September 2023, and finalises after the disassembly phase with a final impact assessment delivered by all Teams to the SDE23 Organisation. After Team selection at the end of 2021, the Teams have nearly two years to design, plan and build, and operate their projects. Within these two years several workshops and events are planned to inspire and support the Teams.



**SDE23 outreach includes:** communication and activation through social media, direct mailing, poster campaigns, press releases, press conferences, connection with worldwide academic communities, visibility at the Venice Biennale and other exhibitions, international actions and boots on the ground!!!

**SDE23 impact includes:** rejuvenation of school curriculae, industry stimulus, shifts in consumer behaviour and modification of consumer purchasing power, energy savings, bolstered workforce, academic research, policy progress ... and full STEAM ahead in schools ...!





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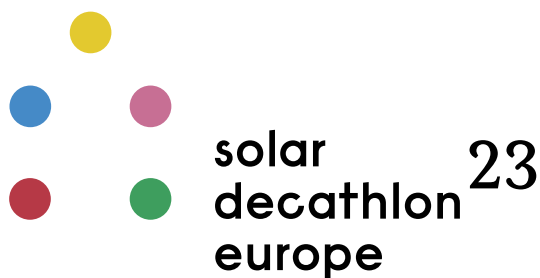
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## 2.6 bucharest, romania \_ home for the SDE23 edition

Situated in the eastern part of Europe, in Balkan peninsula, Romania is surrounded by Bulgaria to the south, Serbia to southwest, Hungary to the west, Ukraine in the northern region, Moldavia to northeast, and Black Sea in the southeast. The Danube, Europe's second longest river, is sourced from the Black Forest Mountains in Germany.

**OUI!** It flows across ten countries and four capitals, before finally arriving to the Black Sea, forming the unique habitat of the Danube Delta, a World Heritage site, and home of a diverse ecosystem. Bucharest, Romania's capital city, is named 'the Little Paris', a result of thriving architectural styles and corresponding cultural influences during the first half of the 20th century.





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### 3\_ recap key topics (ref. pgs 9 > 12)

**CONNECTION** **Connected living** for all scenarios, for rural and / or urban environments, applied to either local, regional, national or international levels;  
Demonstration of how our homes can enable concepts of connected living;  
What does it mean to be connected?

**LOCAL & GLOBAL** **Full-scale functional dwellings** built and presented in Bucharest, intended for a community of choice or origin; the houses will be singular demonstration units of the contextualised proposals, weaving well-integrated, innovative, technical, and technological solutions into healthy and flexible living spaces;

**CONTEXTUALISATION** **Consideration for the project's built environment**, where various contexts of habitation for residential use are addressed; from levels of city block, neighbourhood, suburb, town, and hamlet to broader regional scales;  
Representation and reimagination of contemporary living asks: how can we be intelligently, and comfortably interconnected in our human habitat?

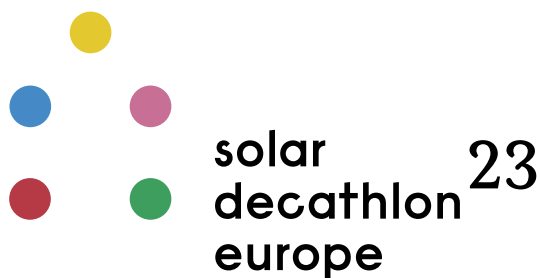
**EUROPEAN POLICY** **SDE23 objectives, consistent with EU goals**, raising energy-literacy and awareness on importance of energy savings to broad audiences; immediate and cost-effective ways of addressing European energy challenges of sustainability, supply sources and competitiveness;

**HEALTHY HOMES** **SDE23 Competition's emphasis on the topic of healthy homes**, including the considerations of transitional and exterior spaces, natural lighting, cross-ventilation, and indoor environmental quality, which includes air quality, as well as other parameters such as noise levels;

**RESILIENCE & SUSTAINABILITY** **Skill and the environmental sensibility** of the Teams' projects to reduce negative environmental impact during the house components' manufacturing, the construction phase, the building's lifespan, disassembly; prepare and plan for, absorb, recover from, and successfully adapt to adverse circumstances.

**SDE FEATURES**

- \_ **singular, experiential, multi-disciplinary learning-by-building**
- \_ **cutting edge system integration & sustainable construction demonstration**
- \_ **energy literacy through valuable & applicable innovation & technology**
- \_ **clean-energy industry & workforce hub**
- \_ **prestigious, international professional networking opportunity**
- \_ **cultural melting pot & broad-audience communication action**
- \_ **holistic project management showcase**
- \_ **platform for public awareness & accessible science**



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## 4\_ sde23 call for teams\_ summary

**MANDATE** The SDE23 Organisation (EEF and SDE23 Host City Executives from the Asociația Solar Decathlon București / EFdeN) is inviting university Teams of creative designers and innovators to enter this SDE23 Competition in Bucharest, Romania. The SDE23 supports the commitment of Europeans to improving science, technology, engineering, arts, and mathematics (STEAM) education efforts, and to building a more knowledge-intensive workforce. SDE23 Organisation is eager to create and support education and workforce development programs that are specific to energy literacy, essential to carrying out the original mandate of the US DOE Solar Decathlon.

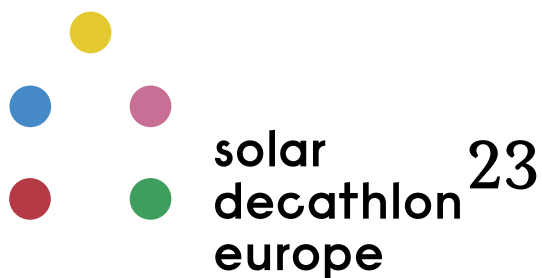
One of the world's most pressing and technically difficult scientific, and engineering, challenges is the development of new, and better, technologies to supply clean and renewable energy. As the world's demand for energy increases and the energy sector grows to meet these needs, we face an impending shortage of the skilled workforce needed to support this sector. An educated and highly-trained workforce is imperative if it is to support today's low-carbon economy as it develops—and lead it to tomorrow. Finding solutions to these challenges is critical today and for our future. For this reason, the EEF supports the development and provision of educational and technical training opportunities for students, and for the workforce.

**SEED FUNDS** The SDE23 Host City Executives will assign up to €100 000 in funding to each selected participating Team that commits to the programme, bringing an eligible project house to the SDE23 Competition in Bucharest. The funds will be awarded to the same lead organisational entities that submit applications and are selected by the SDE23 Organisation's Team Selection Committee to compete, and that complete a Living Demonstration Unit for the Solar Decathlon Europe. Payment schedule will be announced after dissemination of Team selection; ultimately, Teams will receive 100,000€ each, after contractual agreements between SDE23 Host City Executives and Teams are signed.

### 4.1 summary of the SDE23 competition

This SDE23 edition seeks approximately 20 Teams to compete in the Solar Decathlon Europe Competition. The challenge to the Teams competing in the Solar Decathlon is, in less than 24 months, to safely and effectively design, build, and operate solar-powered dwellings that are cost-effective, energy-efficient, and attractive. The winner of the Competition is the Team that best blends affordability, consumer appeal, and design excellence with optimal energy balance and maximum efficiency.





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## 4.2 the sde competition is also a communication action

**CONT.** A important objective of the Solar Decathlon Europe is the development and demonstration of cost-effective, highly energy efficient solar-powered homes. Proposals should indicate how the design will help to achieve this outcome. The articulation of the house concept to broad audiences is integral to this mission and far-reaching mandate.

**N.B.** The SDE23 Rules document will be the basis for the Competition. It will be revised prior to the SDE23 Competition event based on lessons learned at the Solar Decathlon Competitions worldwide. As previously mentioned, the SDE23 Organisation's Team Selection Committee will select approximately 20 university Teams to participate in the Solar Decathlon Europe 2023 Competition.

## 5\_ sde23 call for teams\_ process

### 5.1 schedule

<b>PROCESS</b>	Submission period begins _	June 21, 2021
	Registration begins _	June 22, 2021
	Informational webinar _	September 22, 2021 _ TBD
	Letter of intent deadline _	October 27, 2021 _ 17:00 CET
	Submission period ends _	November 12, 2021 _ 17:00 CET
	Team selection _	December 2021

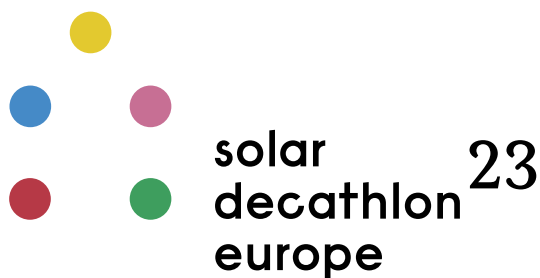
### 5.2 registration (one registration per consortia of institutions)

Teams must register by sending an email to: [application@energyendeavour.org](mailto:application@energyendeavour.org)

The email must contain the following information:

- Institution name;
- Contact person's name and role in the institution;
- Contact person's email and telephone number(s);
- Other institutional partners in the Team.

A confirmation email will be sent with a 6-digit code to be used in all submissions.



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### 5.3 letter of intent (loi)

**Teams are encouraged to send a letter of intent as early as possible.**

To be eligible to submit a full application, applicants must submit their letter of intent before the submission due date to: [application@energyendeavour.org](mailto:application@energyendeavour.org). Letters of intent will be used by the SDE23 Organisation to plan for the review process. The letters should not contain any proprietary or sensitive business information. The letters will not be used for application pre-selection purposes, and do not commit an applicant to submit an application.

#### LOI\_ CONTENTS

The following information must be included in the letter of intent:

- A Project title;
- B 6-digit code given upon registration;
- C Prime applicant university;
- D Project Team (including consortium partners, if applicable), including the lead person for the prime applicant & the backup lead person;
- E List of Team members;
- F Other project participants (i.e., individuals who contribute in a substantive, measurable way to the execution of the project);
- G Thematic focus for the project;
- H Abstract – maximum 400 words in length, with a concise project exposé;
- I Signature by an authorised person (ie. lead person) on behalf of the prime applicant.

### 5.4 questions

Questions relative to the Call for Teams can be sent to: [questions@energyendeavour.org](mailto:questions@energyendeavour.org). Answers to questions will be published on the Solar Decathlon Europe website at: <https://solardecathlon.eu>.

### 5.5 webinar

An online Webinar will be held in September 2021.

Date, time and URL TBD and will be announced through <https://solardecathlon.eu>.

### 5.6 full submission

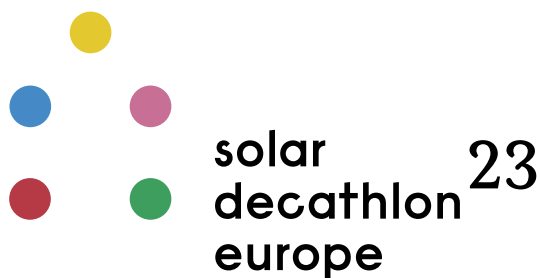
Full submissions are to follow the requirements stated in sections five and six.

### 5.7 selection

After a thorough jury review, Team selection will be finalised by the SDE23 Organisation's Team Selection Committee.

### 5.8 notification

**Teams will be notified of their final application status in December 2021.**



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## 6\_ application & eligibility requirements

### 6.1 eligibility requirements

Teams must be led by a post-secondary educational institution.

### 6.2 application process

The application process requires the submission of a Full Application. The Energy Endeavour Foundation will perform an initial compliance review to determine whether the applications meet the eligibility requirements of the Call for Teams. The EEF will not consider noncompliant and / or nonresponsive or otherwise ineligible submissions. Applications deemed eligible will then be reviewed by a jury with the application requirements stated below.

### 6.3 applications

All Full Applications must conform to the following form and content requirements, including maximum page lengths described below and must be submitted via: [application@energyendeavour.org](mailto:application@energyendeavour.org) or by a file-transfer service with a link indicated in an email sent to [application@energyendeavour.org](mailto:application@energyendeavour.org). The EEF will not review or consider applications submitted through means other than described above; those submitted after the applicable deadline; and incomplete submissions. The EEF will not extend deadlines for applicants who fail to submit required information and documents due to server / connection congestion. A control number will be issued when an applicant sends an initial email to: [application@energyendeavour.org](mailto:application@energyendeavour.org). This number must be included with all application documents, as described below.

### 6.4 fees

A non-refundable fee of 750,00€ is to be paid to the EEF by the submission date to:

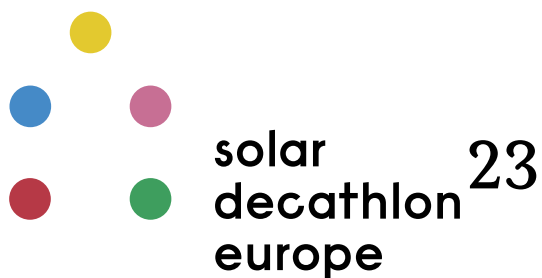
ABN AMRO Bank

Godelindeweg 62 • 1412 HE • Naarden, The Netherlands

Account Holder \_ Energy Endeavour Foundation

IBAN \_ NL54ABNA0547070179 \_ BIC / SWIFT \_ ABNANL2A

The registration fee is used for application processing, jury advisory, and the continued SDE guidance, tools, systems, networks, data, branding, SDE programme advisory, support, and administration.



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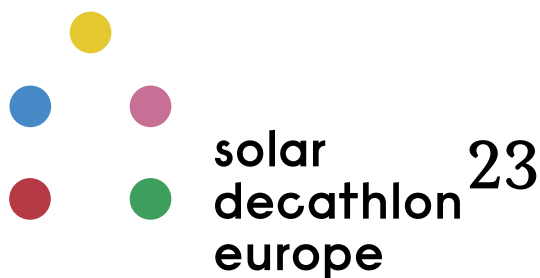
### 6.5 full application requirements

- A** Each application must be submitted in Adobe PDF format unless stated otherwise.
- B** Each must be written in English.
- C** All pages must be formatted to fit on DIN A4 paper with margins not less than 10mm on every side. Please embed the typefaces, use a black typeface colour, and a font size of 12pt (except in figures or tables, which may be 10pt). A symbol font may be used to insert local alphabet letters or special characters; the font size requirement still applies. References must be included as footnotes or endnotes in a font size of 10pt. Footnotes and endnotes are counted toward the maximum page requirement.
- D** The control number must be prominently displayed on the upper right corner of the header of each page. Page numbers must be included in the footer of each page.
- E** Each application must not exceed the specified maximum page limit, including the cover page, charts, graphs, maps, drawings and photographs. If applicants exceed the maximum page lengths, the appointed jury will review only the authorised number of pages and disregard any additional pages.

Applicants are responsible for meeting the submission deadline, and strongly encouraged to submit full applications at least 48 hours in advance of the submission deadline. Once the application is submitted, applicants may revise or update their application until the expiration of the applicable deadline.

Applicants are urged to carefully review their full applications and to allow sufficient time for the submission of required information and documents. As previously stated, all full applications that pass the compliance review will undergo comprehensive jury evaluation according to the criteria identified in this Call for Teams.





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## 7\_ content & form of full applications

Applicants must submit a full application by the specified due date for consideration to enter this Competition. Applicants must complete the application in accordance with the instructions. All full application documents must be marked with the control number issued to the applicant through their registration. Applicants will receive a control number when they create an application and must include that control number in the file name of their full application submission (i.e., number\_organisation\_#\_filename).

### 7.1 full application content requirements

The EEF will not review or consider ineligible applications.

Each full application must be limited to a single project.

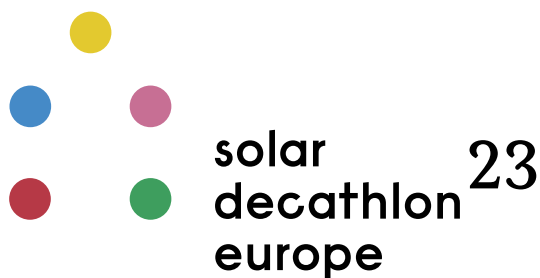
Full applications will consist of the following documents:

Submission	File Name
Application Letter (PDF)	Number_Organisation_0_Letter
Technical Volume (PDF)	Number_Organisation_1_Tech
Budget (Microsoft Excel)	Number_Organisation_2_Budget
Summary for Public Release (PDF)	Number_Organisation_3_Summary
Summary Slide (PDF)	Number_Organisation_4_Slide
Letters of Commitment (PDF)	Number_Organisation_5_Partner

Please find detailed guidance on the content and form of each component below.

#### 7.1.1 application letter

The Application Letter must be written on the lead institution's letterhead and be signed. The letter should include the name of the institution, the appointed lead person(s), their contact information (telephone, email) and a list of any other partner institutions in the application. The letter should be submitted in PDF format. Please save the letter with the following format: 'Number\_Organisation\_0\_Letter'.



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### 7.1.2 technical volume (tv)

The Technical Volume must be submitted in Adobe PDF format. The Technical Volume must conform to the content and form requirements (below), including maximum page lengths. If applicants exceed the maximum page lengths indicated below, only the authorised number of pages will be reviewed; any additional pages will be disregarded. This volume must address the merit review criteria as discussed in this Call. Please save the Technical Volume in a single PDF file using the following convention for the title: 'Number\_Organisation\_1\_Tech'.

- N.B.** Applicants must provide sufficient citations and references to the primary research literature to justify the claims and approaches made in the Technical Volume. The reviewers may review primary research literature in order to evaluate applications. However, the reviewers are under no obligation to review cited sources (i.e. internet websites).

The Technical Volume in the Full Application may not be more than 20 pages, including the cover page, table of contents, and all citations, charts, graphs, maps, photos, or other graphics, and must include all of the information listed below. The applicant should consider the weight of each of the evaluation criteria listed in this Call for Teams when preparing the Technical Volume.

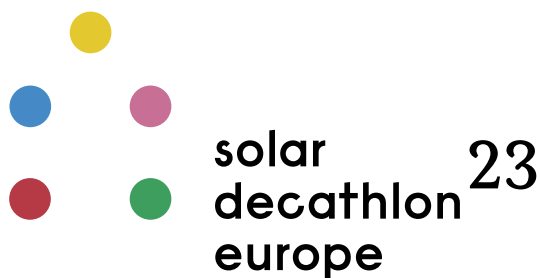
#### TV\_ CONTENTS 7.1.2.1. Cover Page / 1 page

The cover page should include the project title, both the technical and business points of contact, names of all Team member organisations, and any statements regarding confidentiality.

#### 7.1.2.2. Project Overview (approximately 10% of the Technical Volume)

The Project Overview should contain the following information:

- A Background:** The applicant should discuss the background of their organisation, including the history, successes, and current research and development status (i.e. technical baseline) relevant to the topic being addressed in the full application.
- B Project Goal:** The applicant should explicitly identify the targeted improvements to the baseline technology and the critical success factors in achieving that goal.
- C Impact:** The applicant should discuss the impact that this innovative design will have on the current state of the technology in this area.
- D Narrative:** The one-page 500-word maximum narrative will summarise the key elements of the proposal with visuals and / or graphics, ie. sketches, drawings, diagrams, etc.



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### 7.1.2.3. Technical Description, Innovation & Impact (approximately 30% of the Technical Volume)

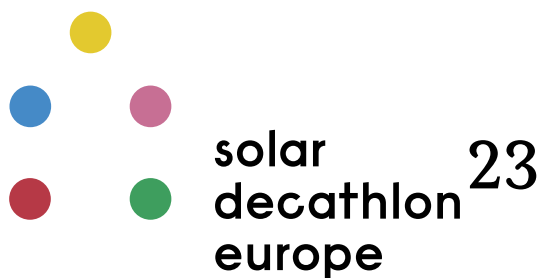
The Technical Description should contain the following information:

- A **Relevance and Outcomes:** The applicant should provide a description of the project. This section should describe the relevance of the proposed project to the goals and objectives of the Call, including the potential to reach the overall target of a climate conscious building stock.
- B **Feasibility:** The applicant should demonstrate the feasibility of the proposed project and capability of achieving the targets, including a description of previous work done.
- C **Innovation and Impact:** The applicant should describe the specific innovation of the proposed project, and its corresponding overall expected impact.

### 7.1.2.4. Workplan (approximately 40% of the Technical Volume)

The Workplan should include a summary of the Project Objectives, Technical Scope, Work Breakdown Structure, Milestones, Go / No-Go Decision Points, and Project Schedule. The Workplan should contain the following information:

- A **Project Objectives:** The applicant should provide a clear and concise statement of the goals and objectives of the project as well as the expected outcomes.
- B **Technical Scope Summary:** The applicant should provide a summary description of the overall work scope and approach to achieve the objective(s).
- C **Work Breakdown Structure and Task Description Summary:** The Workplan should describe the work to be accomplished and how the applicant will achieve the project milestones. The Workplan is to be structured with a hierarchy of performance period (approximately annual) and task plan. The Workplan shall contain a concise description of the specific activities to be conducted over the project lifespan.
- D **Go / No-Go Decision Points:** The applicant should provide a summary of project-wide go / no-go decision points at appropriate points in the Workplan. Unless otherwise specified in the Call, the minimum requirement is that each project must have at least one project-wide go / no-go decision point for each budget period (12 to 18-month period) of the project. The applicant should also provide the specific technical criteria to be used to make the go / no-go decision.
- E **Project Schedule (Gantt chart or similar):** The applicant should provide a schedule for the entire project, including task and subtask durations, milestones, and go / no-go decision points.
- F **Project Management:** The applicant should describe the Team's proposed management plan, including the following:



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- I • The overall approach to and organisation for managing the work;
- II • The roles of each project Team member;
- III • Any critical handoffs / interdependencies among project Team members;
- IV • The technical and management aspects of the management plan, including systems and practices, such as financial and project management practices;
- V • The approach to project risk management;
- VI • A description of how project changes will be handled;
- VII • If applicable, the approach to quality assurance / control;
- VIII • The manner in which communications are maintained among Team members.

#### **7.1.2.5. Technical Qualifications and Resources (approximately 20% of the Technical Volume)**

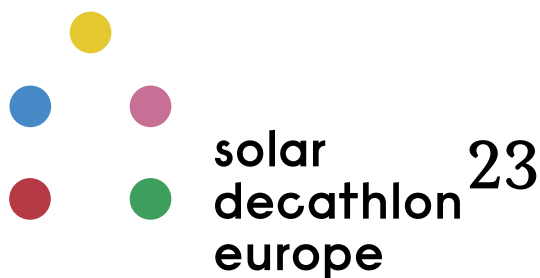
The Technical Qualifications and Resources should contain the following information:

- I • Description of the Project Team's qualifications and expertise, including those of key subrecipients;
- II • Description of the Project Team's existing equipment and facilities that will facilitate the successful completion of the proposed project; this section should also include relevant previous work efforts, demonstrated innovations, and how these enable the applicant to achieve the project objectives;
- III • Description of the time commitment of the key Team members to support the project;
- IV • One-page resumes for key participating Team members as an appendix; Resumes do not count towards the page limit. Multi-page resumes are not allowed.;
- V • Letters of commitment from all subrecipient / third party cost share providers as an appendix; letters of commitment do not count towards the page limit.

#### **7.1.2.6. Letters of support from partners / end users as an appendix (1 page maximum per letter). Letters of support do not count towards the page limit. For multi-organisational or multi-investigator projects, please describe succinctly:**

- I • The roles and the work to be performed by each partner and / or end user;
- II • Business agreements between the applicant and each PI and key participant;
- III • How the various efforts will be integrated and managed;
- IV • Intellectual property factors.





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### 7.1.3 budget

Applicants are required to estimate a Budget. The budget must be for the project as a whole, including all work to be performed by the applicant, partners, and their subrecipients and contractors. Save the Budget in a single Microsoft Excel file using the following convention for the title 'Number\_Organization\_3\_Budget'.

### 7.1.4 summary / abstract for public release

Applicants are required to submit a one-page summary/abstract of their project. The project summary / abstract must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained document that identifies the name of the applicant; the project director / principal investigator(s); the project title; the objectives of the project; a description of the project, including methods to be employed; the potential impact of the project (i.e., benefits, outcomes); and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information as the EEF and Asociatia Solar Decathlon Bucuresti (EFdeN) may make it available to the public after Team selections are made. The project summary must not exceed 1 page when printed using standard DIN A4 paper with 1 cm margins (top, bottom, left, and right) with a typeface not smaller than 10 point. Save the Summary for Public Release in a single PDF file using the following convention for the title 'Number\_Organization\_4\_Summary'.

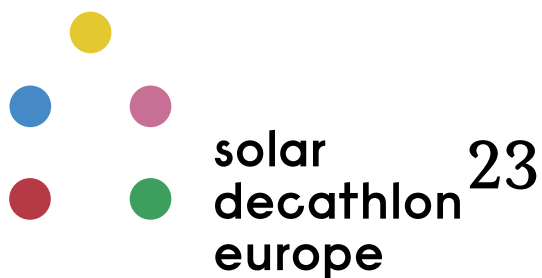
### 7.1.5 summary slide

Applicants are required to provide a single 16:9 ratio (Keynote, PowerPoint or other) slide summarising the proposed project; the minimum resolution is 1920 x 1080. This slide is used during the evaluation process. Please save the Summary Slide in a single-page PDF file entitled 'Number\_Organization\_5\_Slide'. The Summary Slide requires the following information:

- A project Summary;
- A description of the project impact;
- Proposed project goals;
- Any key graphics (illustrations, charts and / or tables);
- The project's key idea;
- Project title, prime recipient, principal investigator, and key participant information.

### 7.1.6 letters of commitment

Applicant will need a letter of commitment from the leadership (head, president, or rector of universities) of all partner institutions that make up the applicant Team consortium (if applicable). Please save these as one page PDF named: 'Number\_Organisation\_6\_Partner'.



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## 8\_ evaluation criteria

Technical reviews are conducted by jury experts in the subject matter of this Call for Teams. Ultimately, the SDE23 Organisation will consider the recommendations of the reviewers, along with other considerations such as program policy factors, in determining which applications to select.

### 8.1 criterion 1: competence and innovation (weight: 25%)

The proposal demonstrates that the institution(s) is taking an approach to the project that is simultaneously innovative and practical. The proposal demonstrates that the project is plausible with respect to the Teams' experiences and resources.

### 8.2 criterion 2: sponsorship engagement & team support (weight: 25%)

The proposal demonstrates a clear understanding of the costs associated with the project and the need for obtaining sufficient sponsorship or other funds to support all phases of the two-year project. Industry engagement has been considered.

### 8.3 criterion 3: organisation & project planning (weight: 20%)

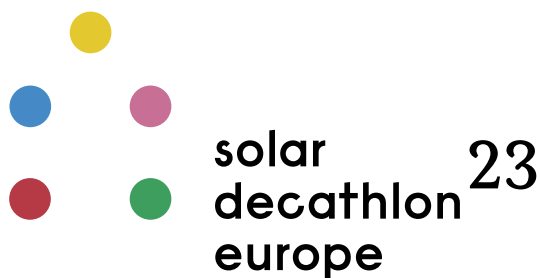
The proposal demonstrates that the Team understands all the activities involved in the project. The activities are planned and organised adequately to ensure successful completion.

### 8.4 criterion 4: conceptual intention (weight: 15%)

The concept communicates ideas, character, and forms of an architectural contribution towards carbon neutrality in the building stock.

### 8.5 criterion 5: curriculum & integration (weight: 15%)

The proposal demonstrates that the institution(s) has / have a building science curriculum and that the Solar Decathlon Europe project is well-integrated into the students' course work.



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## 9\_ notification of selected teams

### 9.1 selection notices

The SDE23 Organisation anticipates notifying applicants of its decisions before the end of December 2021.

### 9.2 ineligible applications

Ineligible applications will not be considered or reviewed. The EEF will send a notification letter by email to the technical and administrative points of contact designated by the applicant in their application. The notification letter will state the basis upon which the full application was considered ineligible.

### 9.3 full application notifications

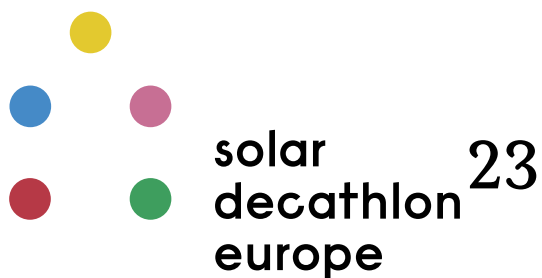
The EEF will notify applicants of its determination via a notification letter by email to the technical and administrative points of contact designated by the applicant. The notification letter will inform the applicant that its full application was selected for the Competition, or not selected. If the application was not selected, the written notice will explain why the application was not selected. Alternatively, the EEF may notify applicants that a final determination on a particular full application will be made at a later date, subject to programmatic or other factors.

### 9.4 successful applicants

A notification letter selecting a full application for the Competition does not authorise the applicant to commence performance of the project. If an application is selected for the SDE23 Competition, it is not a commitment to issue funding. Applicants must designate a primary and a backup point-of-contact in their application with whom the SDE23 Host City Executives (Asociatia Solar Decathlon Bucuresti / EFdeN) will communicate regarding contractual protocols for the €100 000 seed funds. The applicant must be responsive during negotiations (ie. provide requested documentation) and meet the negotiation deadlines. If the applicant fails to do so or negotiations are otherwise unsuccessful, the SDE23 Host City Executives (Asociatia Solar Decathlon Bucuresti / EFdeN) will cancel negotiations and rescind the selection. The SDE23 Organisation reserves the right to terminate negotiations at any time for any reason.

### 9.5 terms & conditions

Selectees must continue to comply with all terms and conditions of the SDE23 Rules, and receiving funds or other awards is contingent upon fulfilling all requirements contained therein.



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## contact information

Energy Endeavour Foundation  
Godelindeweg 62  
1412HE Naarden  
The Netherlands

email questions to \_ [questions@energyendeavour.org](mailto:questions@energyendeavour.org)  
email applications to \_ [application@energyendeavour.org](mailto:application@energyendeavour.org)

Bank Transfers \_  
ABN AMRO Bank  
Coolsingel 93  
3012 AE Rotterdam, Netherlands  
IBAN: NL54ABNA0547070179  
BIC/SWIFT: ABNANL2A

**Combine youth, resource-responsibility, and competition**

**to activate greatest interest in a sustainable future.**

**Empower next generations of clean-energy workforces.**

**Stimulate growth through corporate engagement**

**and entrepreneurial spirit. Showcase design and technologies**

**that teach us how to live responsibly. Establish yourselves**

**as a leaders in energy transition. Make a difference.**



*The Energy Endeavour Foundation supports the mandate, vision and objectives  
of the original U.S. Solar Decathlon, initiated by the U.S. Department of Energy.*