



energy endeavour  
FOUNDATION

GOVERNING BODY OF THE SOLAR DECATHLON EUROPE

The Energy Endeavour Foundation (EEF) is endorsed by the U.S. Department of Energy to govern the Solar Decathlon Europe. Providing the structure and framework for the SDE, custodian of the SDE Rules and brand, the EEF designates Host Cities and competing Teams through European SDE Calls for Cities and international SDE Calls for Teams. The EEF transfers strategic tools, best practices, and project-specific knowledge to SDE Host Cities, ensuring the quality and continuity of the SDE, from one edition to the next.

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**REASONS WHY: HOSTING THE SDE25,  
OUR NEXT EDITION OF THE PREMIER INTERNATIONAL  
STUDENT COMPETITION FOR REGENERATIVE HABITATION.**

## Reasons Why.

Hosting the SDE25, our next edition of the premier international student Competition for regenerative habitation.

This document represents a generous overview of the incentives behind the Solar Decathlon Europe (SDE).

It is intended for potential stakeholders with an interest in hosting this singular Competition in regenerative habitation.

In an attempt to synthesise the motivating factors behind a complex and demanding project, the Energy Endeavour Foundation (EEF) has extracted the most valuable sections from a legacy of related documentation. We thank you for reading this document in full.

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## The Solar Decathlon Europe. Simply singular.

The SDE is the award-winning Competition challenging university Teams to design, build, and operate full-scale energy-efficient dwellings that are cost-effective, resource-responsible, comfortable, and attractive. It is the premier, international, student-driven renewable energy architectural challenge, a public event attracting broad audiences for energy-literacy and behavioural change.



## The SDE Competition event has impact.

Extending 'learning by doing' to 'learning by building', the SDE invites students to design, build, and operate 1:1 resource-optimised prototype dwellings. The buildings are constructed in record time ( $\approx$  fourteen days), creating a 'solar village', then measured and judged in ten contests. The village is a public forum and living lab, educating wide audiences through accessible, affordable innovations and technologies, all contributing to responsible habitation. This singular learning-by-building experience galvanises clean-energy workforce development and behavioural change, inspiring students worldwide in disciplines that include design, architecture, engineering, communication, finance, and renewable energy management.



SDE21/22, Germany



SDE19, Hungary



SDE14, France



SDE12, Spain  
SDE10, Spain, images available on request.

## Hosting the Solar Decathlon Europe & reasons why.

This document is intended to provide a quick insight for those interested in hosting the upcoming edition of the Solar Decathlon Europe Competition event. The Solar Decathlon Europe (SDE) is an intrepid, ingenious, and responsible programme, invigorating to all stakeholders, and important for the future of our homes, habitats, and human interaction. The SDE serves as a catalyst: improving building science education, stimulating industry, boosting workforce and economic development. Through its unique combination of youth-driven ambition, resource-responsible innovation, and keen competition, the SDE offers a platform to showcase building design in our future human habitat, galvanising broad, multi-generational, and international audiences.

The sde objectives are the reasons to host\_ five reasons why:

- 1 act\_ protect the planet & worship our human habitat
- 2 shape\_ contribute to our future through resource optimisation
- 3 motivate\_ communicate & educate in innovation & technology
- 4 stimulate\_ provide workforce & economic opportunities
- 5 trigger\_ raise energy literacy & behavioural change



## Host cities **act** on the mission to protect the planet & worship our world.

Learn by building\_\_ stimulate the personal and professional trampoline\_\_ build spaces, build lives!

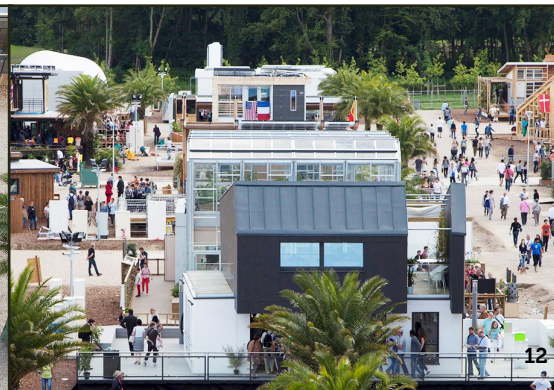
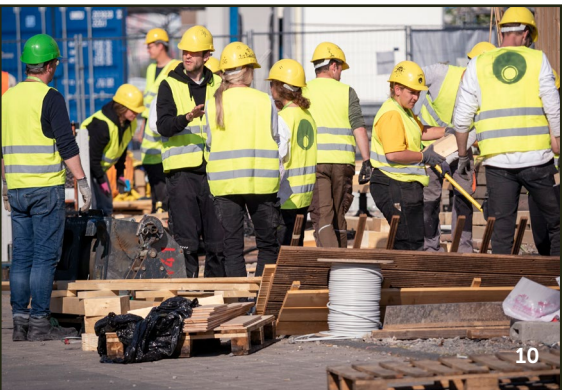
The SDE brings singular hands-on experience and a unique professional platform to students toward clean-energy careers in architecture, engineering and other cross-pollinated disciplines. It fosters R & D, integrating renewable-energy technologies and innovation from ambitious students and worldwide universities. Opportunities for industry and entrepreneurship are stimulated through the design, construction and operation of energy-efficient buildings. The SDE raises broad public awareness and energy-literacy, through real-life solutions to real-world challenges.



cont. By hosting, cities **act** to protect the planet & our human habitat. Here's how.

- \* exemplify resource-optimisation through a safe, fair, efficient and inspirational 6<sup>th</sup> SDE Competition event
- \* provide top-level training during the intensive preparation period
- \* support and mentor Decathlete Teams through the assembly phase to completion of the 1:1 built prototype
- \* greet hundreds of new Decathletes into the ever-growing worldwide Solar Decathlon community
- \* honour the ten-contest Competition event through structured divisions including:
  - > Competition management > infrastructure > event production > sponsorship
  - > communication and information tech > scientific and educational outreach
- \* maintain Rules and juried or measured scoring of ten contests, relating to energy-use in European dwellings
- \* design and safely implement the solar village electrical grid, internet, logistics, infrastructure, visitor education
- \* collaborate with the EEF governing body to support SDE Competition protocols and preserve SDE values
- \* recruit and recognise industry partners in sponsor programmes
- \* create an inspiring public venue showcasing the results driven by building, simultaneously, in-situ

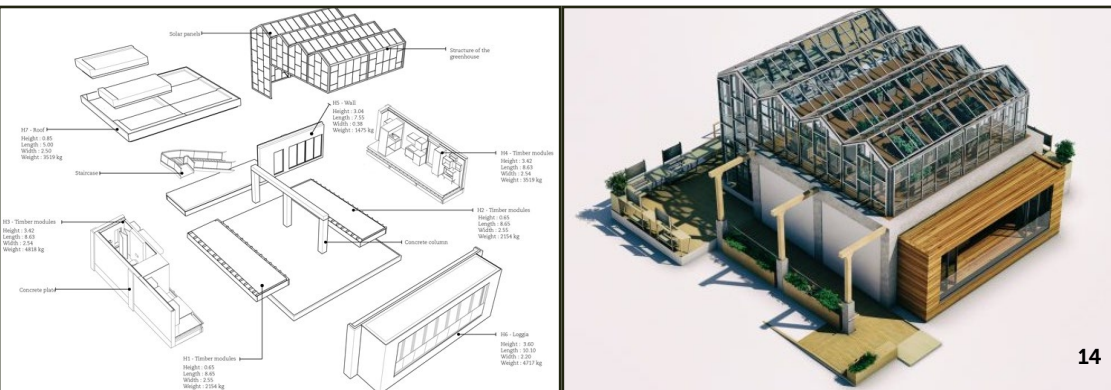
the ten SDE contests **architecture\_ engineering & construction\_ energy performance\_ communication, education & social awareness**  
**innovation\_ affordability & viability\_ sustainability\_ comfort\_ house functioning\_ urban mobility**



## SDE hosts **shape** the future, actively contributing to resource optimisation.

PropTech\_ technology\_ innovation\_ bim\_ big data\_ apps\_ optimisation\_ internet of things\_ start-up ecosystems...

The SDE steers Teams to use and showcase the most advanced technologies, spurring industry, professionals and consumers alike to deploy innovative solutions and technologies in their daily household habits and choices. Teams also engage at the community level, leading the way with demonstrable smart-grid / home interaction; balancing needs and availability to reduce the overall environmental footprint of homes and communities. This kind of interaction also fuels big data, engaging investors interested in 'proptech' to better manage their existing and future portfolios. At every level, the start-up mind-set stimulates solutions and viable business concepts. The Solar Decathlon Europe is a platform for creative disruption, instigating and fostering change towards a self-reliant and sustainable society.



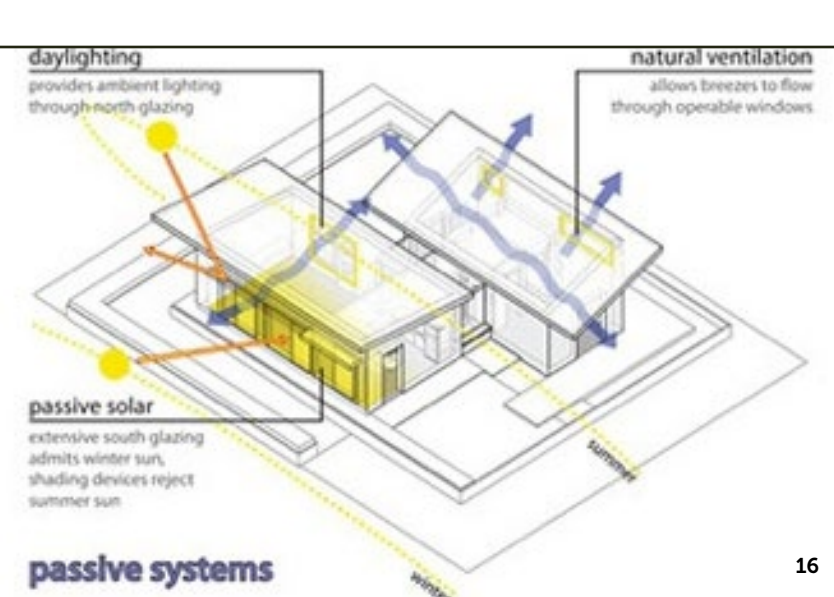


cont. Host Cities **shape** the future with next generations of clean-energy ambassadors.

- \* showcase new technologies powered by youth
- \* demonstrate responsible design solutions
- \* provide technological answers to challenges in energy-efficiency
- \* stimulate innovation in combining responsible design and technology
- \* champion Decathletes to utilise building information modelling
- \* embrace big data, home automation apps, internet of things appliances
- \* foster entrepreneurial start-up ecosystems for their innovations

Some key topics demonstrating advancement:

spatial configuration\_ advanced photovoltaics\_ heat exchangers \_ intelligent controls\_ integrated appliances\_ smart grids



# Hosting **motivates** broad audiences through communication, innovation & tech.

youth\_ academics\_ professionals\_ policymakers\_ industry leaders\_ children\_ teenagers\_ general public

The Solar Decathlon Europe is a proven international educational and training programme preparing students for the clean-energy workforce with real-world, hands-on experience. The Solar Decathlon Europe also results in broader consumer understanding of how to save money at home with clean-energy solutions.

media presence **ANALYTICS 2010-2019**

PLATFORM	ACTION	IMPACT / VIEWS
Facebook	Followers	16.500
	Impressions (incl. Teams)	50.000.000
Twitter	Followers	3.200
	Impressions (incl. Teams)	2.000.000
Websites	Impressions (sde)	1.550.000
	Impressions (incl. Teams)	100.000.000
Solar Village	Visitors to SDE House & Village Tours	500.000
Estimated Global SDE reach	Media Impressions	600.000.000

EEF calls **DIRECT RESPONSE TO RECENT ENERGY ENDEAVOUR FOUNDATION CALLS**

CALL	DATES	IMPACT / VIEWS
Call for Cities 2019	02/2017 - 03/2017	30.000
Call for Teams 2019	07/2017 - 10/2017	80.000
Call for Cities 2021	07/2018 - 10/2018	100.000
Call for Teams 2021	04/2019 - 10/2019	150.000
Total EEF Call Outreach	SDE19 & SDE21	361.000

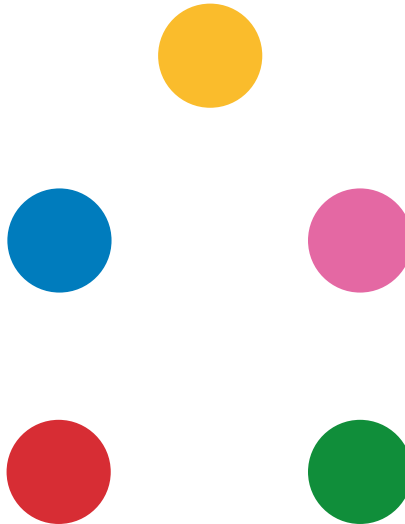
This table represents figures for the recent EEF governed Solar Decathlon Europe editions, excluding the responses to the SDE23 edition which was subsequently closed.



cont. The SDE **invites** & unites citizens as a global capital of sustainability.

The SDE Competition and exhibition areas become a two-week public celebration. Activities are plentiful, varied, and engaging: showrooms, conference areas, cultural activities, and partner stands are integral parts of any solar village. The Host City is promoted as an international capital of sustainability for visitors of all ages, demographics, and professional sectors. Public house tours are provided by Decathletes themselves, for first-hand experiences on the comfort and savings in homes that combine energy-efficient construction, home systems, appliances, and innovative design with onsite renewable energy production. All of this under the recognised SDE brand.

- \* showrooms
- \* conferences
- \* parades
- \* debates
- \* tech demos
- \* children's workshops
- \* music
- \* vip events
- \* corporate networking
- \* guided tours



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cont. The SDE **inspires** all stakeholders & leads to behavioural change. Here's how.

- \* international visibility through the broader Solar Decathlon worldwide movement
- \* five successful SDE editions\_ Spain, SDE10, SDE12; France, SDE14, Hungary, SDE19, Germany, SDE21/22
- \* 81 ambitious participating Teams, 4000 + Decathletes, representing 53 countries
- \* 400 + engaged sponsors and supporting entities per SDE edition / event
- \* 650.000 + active consumers and visitors to Solar Villages
- \* 11.000 + media impressions reaching over 500 M viewers worldwide
- \* important short-term economic impact reaches 2x - 3x of Host City expenditure
- \* SDE contribution to ecological purchase decisions from most visitors within one year
- \* long-term impact based on clean energy workforce and resource responsible civic pride



## Hosting the SDE **stimulates** economies & workforce opportunities.

**hospitality industry\_ clean-energy purchase decisions\_ workforce development\_ entrepreneurship\_ smart city development**

Solar Decathlon Europe Host Cities stimulate economies and workforce opportunities through hospitality and event management sectors, providing incentives to consumers toward clean-energy purchases and a clean-energy economy. Opportunities flourish for regional and national workforce development, which encourages innovation and technological advancement. SDE Teams band together, creating long-lasting entrepreneurial businesses, realigning economic opportunities to fit our future.

**direct impact** Local economic impact of the Solar Decathlon event is noticeable. Based on studies carried out at other Solar Decathlon events, the following economic impact can be extrapolated from attendance figures and visitor questionnaires:

ITEM	NOTES	IMPACT
Direct Economic Impact of Participants	20 Teams + Organisers, 1100 Participants @ € 1200 / Participant	€ 1 320 000
Economic Impact of Attendees (avg. 120.000 people per event)	10 000 Multi-day (€180), 110 000 single day (€ 80)	€ 10 600 000
Other Economic Impact	Conferences, Parallel Events 12 000 Attendees	€ 2 160 000
<b>Total Event Impact</b>		<b>€ 14 080 000</b>

This table represents figures for an average Solar Decathlon event based on these sources:  
US DOE, SDUS13 Impact Assessment, UPM SDE10 & SDE12 documentation.



cont. The SDE **promotes** opportunities: regional, national, international.

The Solar Decathlon Europe Competition event attracts a wide range of sponsors and supporters, providing incentives to those investing in clean-energy technologies, cutting edge talent, and new business opportunities. All SDE stakeholders come away with a greater understanding of our changing behaviour, and purchasing decisions, in our ever-thriving built environment.





cont. The SDE **activates** economies with engaged sponsors & supporters.

The following pages present a selection of SDE19 Team sponsors and supporting entities. The list is non-exhaustive, a reflection of the diverse sectors and stakeholders in building construction, sciences, and energy-efficiency sectors. The support reveals extensive and cross-pollinated interest, involving academia, commerce and industry, and other institutional entities.

Academic support and sponsorship for SDE19 Teams (non-exhaustive):



cont. The event **invigorates** networking: commercial, industrial, institutional.

Commercial support and sponsorship for SDE19 Teams (non-exhaustive):



cont. SDE networking **stimulates** economies: local, regional, national, international.

Other institutional support and sponsorship for SDE19 Teams (non-exhaustive):



cont. SDE networking **stimulates** economies: local, regional, national, international.

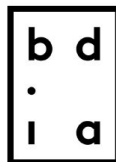
Institutional and commercial sponsorship and support for SDE21/22 Competition event (non-exhaustive):

Supported by:



UTOPIASTADT

on the basis of a decision  
by the German Bundestag



Landesbetrieb Wald und Holz  
Nordrhein-Westfalen



cont. **Host the SDE & trigger behavioural change through increased energy literacy.**

Testimonials on leadership, quality design, building science, research, and future careers:

“In a world where resources are limited, it is necessary to resort to new technologies for resource optimisation. That is why there is a need for research groups offered by higher education. It is the perfect opportunity to put the results into practice and show citizens the impact of sustainability.”

**Ana Camila Vargas, SDE19 Aura Team, Spain**



“I’ve always considered Solar Decathlon as a great potential for business opportunity. Because of this, I’ve moved on after the Competition, currently working on a start-up in this field. At the moment we are developing energy efficient, modular, and 100% prefab houses, built primarily of natural materials (wood, straw insulation, clay, etc). We’ve built a prototype in Romania and continue to improve it, in order to give people the possibility to buy an energy efficient house, as they do with a car.”

**Daniel Butucel, SDE19 Over4 Team, Romania**



“Ecological transition and the fight against climate change require all actors in the building industry to rethink the design process and move towards a frugal approach... Sharing is better and the future lies in the development of a social and solidary economy. More specifically, one of the main goals of the SDE is to develop a structure that engages in research and development through architecture and environmentally conscious design.”

**Denitsa Hristova, SDE19 Habiter2030 Team, France**



cont. Host the SDE & **trigger** behavioural change through increased energy literacy.

SDE21/22 Decathletes describe the SDE Competition experience in one word:



Solvable.  
**Yen-Chun**  
TDIS Team  
Taiwan



Intense!  
**Quinn Hanitio**  
C-HIVE Team  
Sweden



Unifying.  
**Simon Beckers**  
Local+ Team  
Germany



Progressive!  
**Nikki de Zeeuw**  
SUM Team  
Netherlands



Educational.  
**Musa Kerim**  
Deeply High Team  
Turkey

## Raise awareness & **boost** behavioural change.

Testimonials on purpose, strategy, social impact and continuity:

“ABN AMRO possesses a clear and bold purpose: banking for better, for generations to come. Our sustainable strategy is built on concrete ambitions in the area of climate change, the circular economy and social impact. The TU Delft MOR project has a lot in common with our sustainable ambitions and builds further on generations to come. Combining strength and expertise seemed logical. Our support resulted in exchange of knowledge between TU Delft, business partners of ABN AMRO, and employees of ABN AMRO itself. These valuable insights brought all of us a step closer to our sustainable ambitions, and the innovative solutions presented by MOR definitely created inspiration for opportunities and more corporate involvement.

**Petran van Heel, Sector Banker, Construction, ABN AMRO, Netherlands**



Like the Olympics, the Solar Decathlon Europe relies on an international stewarding body; the Energy Endeavour Foundation provides the continuity between Solar Decathlon Europe events, transferring from one SDE edition to the next, the valuable knowledge and experience to future SDE Organisers and competing Teams.

**Emeline Ritt, Former Chair of the Board of Directors, Energy Endeavour Foundation**



## Host the next Solar Decathlon Europe.

Combine youth, resource-responsibility, and competition to activate greatest interest in a sustainable future. Empower next generations and clean-energy workforces. Stimulate growth through corporate sponsorship and entrepreneurial spirit. Showcase design and technologies that teach us how to live responsibly. Establish your city as a leader in energy transition. Make a difference.



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V. 15: sdus11 Team Appalachian State University

V. 16: sd11 Team Maryland

V. 17: sde12 Team Canopea

V. 18: sde21 Team C-Hive Sweden @SDE21-22

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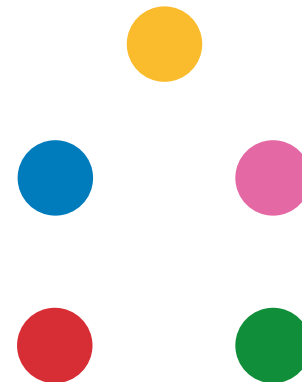
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## Information & Contact.

Detailed documentation regarding the official SDE25 Call for Cities can be found here:

[HTTPS://SOLARDECATHLON.EU/SDE25 -CALL-FOR-CITIES/](https://solardecathlon.eu/sde25-call-for-cities/)

Please send full applications to:

[APPLICATION@ENERGYENDEAVOUR.ORG](mailto:APPLICATION@ENERGYENDEAVOUR.ORG)

Please send questions regarding SDE25 Call for Cities applications to:

[QUESTIONS@ENERGYENDEAVOUR.ORG](mailto:QUESTIONS@ENERGYENDEAVOUR.ORG)

## Thank-you & well-wishes!

**Louise Holloway**

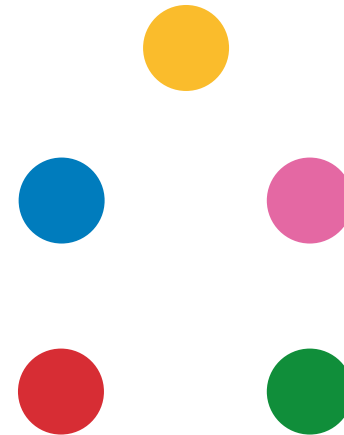
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*The Energy Endeavour Foundation supports the mandate, vision and objectives of the original U.S. Solar Decathlon, initiated by Richard King at the U.S. Department of Energy.*