

LAGI 2016

SANTA MONICA | Powering Places in Southern California



LAGI 2016 DESIGN GUIDELINES

LAGI 2016 invites creatives, scientists, engineers, and others from around the world to submit ideas for large-scale and site-specific public art installations that generate carbon-neutral electricity and/or drinking water for the City of Santa Monica, California.

land art generator initiative

LAGI 2016 Team

ROBERT FERRY

LAGI Founding Co-Director

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LAGI 2016 Supporters

LAGI IS A RECIPIENT OF THE J.M.K. INNOVATION PRIZE, A PROGRAM OF THE J.M. KAPLAN FUND

LAGI 2016 is partially supported by this award



ELIZABETH FIRESTONE GRAHAM FOUNDATION

For support of the 2016 LAGI Prestel Publication

LAGI 2016 Partners



About LAGI 2016

We are pleased to be holding the fourth international Land Art Generator Initiative (LAGI) design competition for the City of Santa Monica. Every two years, as the events of the previous competition are still unfolding, we begin a search for the next LAGI design site. Each time we seek an inspiring location that offers artists and designers a novel canvas upon which to create. Without a doubt, the LAGI 2016 design site offers the most versatile and amazing opportunity yet. Adjacent to one of the world's historic cultural landmarks, and with the full power of the Southern California sun, the coastal winds, and the Pacific Ocean waves and tides at your direction, there is nothing to limit your imagination.

LAGI 2016 comes to Southern California at an important time. The sustainable infrastructure that is required to meet California's development goals and growing population will have a profound influence on the landscape. The Paris Climate Accord from COP 21 has united the world around a goal of 1.5–2° C, which will require a massive investment in clean energy infrastructure. LAGI 2016 is meant to provide a positive and proactive vision of how these new infrastructures can be enhancements to our most cherished places. Whether providing clean and renewable electricity to power our homes and automobiles, or providing the clean water so vital to our survival, public services are at their brightest when they can be a celebrated component of urban planning and development. LAGI 2016 is an opportunity to present your vision of what our energy landscapes can aspire to be in their built form.

Now, more than ever, energy and water are intertwined. As California faces severe water shortages in the coming years, the amount of energy required for water production and transmission is sure to increase. For this reason we are expanding our definition of sustainable infrastructure artwork to include proposals in 2016 that produce drinking water—either in addition to, or in place of—clean electricity.

LAGI 2016 fits nicely into the context of the ongoing efforts being made in Santa Monica to increase efficiency of water consumption and to harvest water sustainably. The Santa Monica Pier is currently investigating ways to drastically reduce the use of potable water on site, like the use of recycled seawater for toilet flushing, to take one example.

The City of Santa Monica has demonstrated the ability of sustainable infrastructures to provide an aesthetic and educational amenity for the community through its Santa Monica Urban Runoff Recycling Facility (SMURFF), located just next to the Pier. Visitors to the facility can learn about stormwater runoff, water-borne particulates, filtration processes, and large-scale rainwater reuse at the facility, which treats an average of 500,000 gallons per day of urban runoff (and looks nice too).

Your proposal to LAGI 2016 will serve to push the conversation even further and will provide new ideas for innovation. By elevating the vital urban systems that provide our energy and water to the level of public art, we can challenge those who would disapprove of these important infrastructures

on aesthetic grounds, especially at sites that are cherished for their cultural value and identity (like the Santa Monica Pier Breakwater).

LAGI 2016 is an ideas competition to design a site-specific public artwork that, in addition to its conceptual beauty, has the ability to harness energy cleanly from nature and convert it into electricity and/or drinking water for the City.

The 2016 design site offers participating teams the opportunity to utilize wave and tidal energies as well as wind, solar, and other technologies.

The award ceremony, exhibition, and book launch will be in Los Angeles in early October at Greenbuild 2016 in partnership with USGBC LA Chapter. Community events will be held in collaboration with project partners and there will be a book (published by Prestel) that will document selected submissions.

This unique programming will show how interdisciplinary collaboration is playing an important role in defining the design influence of renewable energy on our constructed environments and point out the reciprocal role of society in defining the aesthetics of renewable energy infrastructure itself.

What is LAGI?

The Land Art Generator Initiative was founded in 2008 with the main goal of providing a platform for the design and construction of public art installations that have the added benefit of large-scale clean energy generation. Once built, each sculpture will continuously distribute clean energy into the electrical grid at a utility scale (equivalent to the demand of hundreds or thousands of homes).

Presenting the power plant as public artwork—simultaneously enhancing the community, increasing livability, and stimulating local economic development—is a way to address a variety of issues from the perspective of the ecologically concerned artist and designer.


By nature of its functional utility, the work also sets itself into many other overlapping disciplines such as architecture, landscape architecture, engineering, applied science research, industrial design, urban planning, education, and environmental science. This interdisciplinary result has the effect of both enhancing the level of innovation and broadening the audience for the work.

Thank you for taking part in LAGI 2016.

-Robert Ferry and Elizabeth Monoian
LAGI Founding Co-Directors

LAGI 2016 Design Site: Coastal Waters Surrounding the Santa Monica Pier

your
artwork
here



LAGI 2016 is asking teams to design a public artwork that generates clean energy and/or drinking water at the breakwater site at the Santa Monica Pier.

Detailed information about the site is downloadable from the LAGI 2016 design competition website:

www.landartgenerator.org/designcomp

Supplemental materials available for download at:
www.landartgenerator.org/designcomp

LOCATION PLAN and SITE BOUNDARY

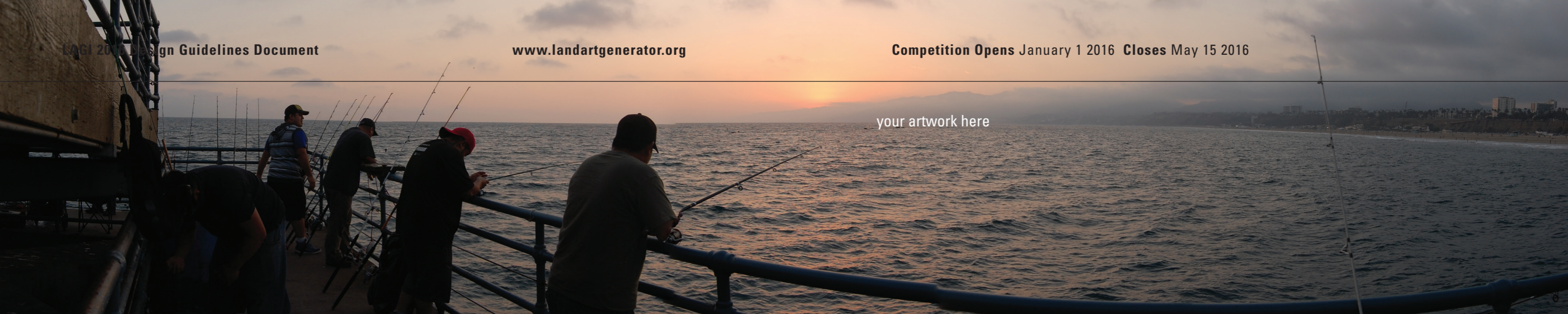
PHOTOS

METEOROLOGICAL DATA

SANTA MONICA SUSTAINABILITY PLAN

CALIFORNIA 2014–2016 ISO STRATEGIC PLAN

ADDITIONAL SUPPLEMENTAL INFORMATION



your artwork here

LAGI 2016 Design Brief

A qualified entry to the LAGI 2016 design competition must:

- Consist of a three dimensional sculptural form that has the ability to stimulate and challenge the minds of visitors to the site. The work should aim to solicit contemplation from viewers on such broad ideas as ecological systems, human development and habitation, energy and water resource consumption and production, and/or other concepts at the discretion of the design team;
- Convert natural energy into electricity and/or drinking water at the site. The artwork must have the ability to store, and/or transform and transmit the electrical power it generates to a grid connection point to be designed by others. Consideration should be made for artfully housing the required transformer and electrical equipment (balance of system) within the project boundary and restricting access to those areas for the safety of visitors to the site. Similar considerations should be made for drinking water production and transmission technology if incorporated;
- Be pragmatic and constructable, employing technologies that can be scalable and tested. There is no limit on the type of technology that is specified. It is recommended that the design team make an effort to engage the owners of proprietary technology in preliminary dialogue as a part of their own research and development of the design entry. The more pragmatic the proposals are, the greater the likelihood will be that one of them may get built;
- Not create greenhouse gas emissions and not pollute. The work must not impact the natural surroundings negatively*. Each entry must provide a brief (approximately 300 words) environmental impact assessment as a part of the written description. The statement should include a list of the effects of the project on the natural ecosystem and should propose a mitigation strategy to address them;
- Be well informed by a thorough understanding of the history, geography, restrictions, and details of the design site, and the broader surrounding and regional contexts;
- Be safe to people who would view it. Consideration must be made for viewing platform spaces and boundaries between public and restricted areas. Boats can access the area around the breakwater, but swimming out to, or near the existing breakwater is prohibited;
- Be designed specifically to the constraints of the design site at the Santa Monica Pier as shown in the Location Plan (available for download). Designs can (but are not required to) allow visitors to walk within the project boundary;
- Designs must not exceed 80 meters in height (2x the height of the Pacific Ferris Wheel); and
- Must be in English.

LAGI 2016 Selection Criteria

The LAGI 2016 jury will make their decisions based on the following:

- Adherence to the Design Brief;
- The integration of the work into the surrounding environment and landscape;
- The sensitivity of the work to the environment, and to local, and regional ecosystems;
- The estimated amount of clean energy and/or drinking water that can be produced by the work;
- The way in which the work addresses the public;
- The embodied energy required to construct the work;
- The perceived return on capital investment of the work, judged by the complexity of the design in relation to the energy it produces each year;
- And the originality and social relevance of the concept.

* For example, a proposal to generate potable water by desalinating ocean water must take into consideration the downstream effects of brine disposal and the impacts of the process on the marine ecosystem.

FIRST PLACE

winning submission will be awarded
\$15,000

SECOND PLACE

winning submission will be awarded
\$4,000

One representative of the first place winning team will be flown to Los Angeles for the award ceremony and exhibition opening.

California Drought

Last year, the State of California experienced unprecedented drought conditions and has enacted water conservation policies. Please reflect on the interconnected nature of the water-energy nexus in Southern California.

LAGI 2016 Design Site: Coastal Waters Surrounding the Santa Monica Pier

A Brief History of the Santa Monica Pier*

The first concrete pier on the West Coast was constructed on this location in 1909 and included an infrastructural purpose (albeit not a very environmentally conscious one)—to cast untreated waste water far enough past the surf so that it would drift out to sea. Opening day was a major event with a naval cruiser and flotilla anchored offshore for the occasion. By 1916 the Pier was home to an amusement park. The concrete piles were replaced with wooden piles in 1920.

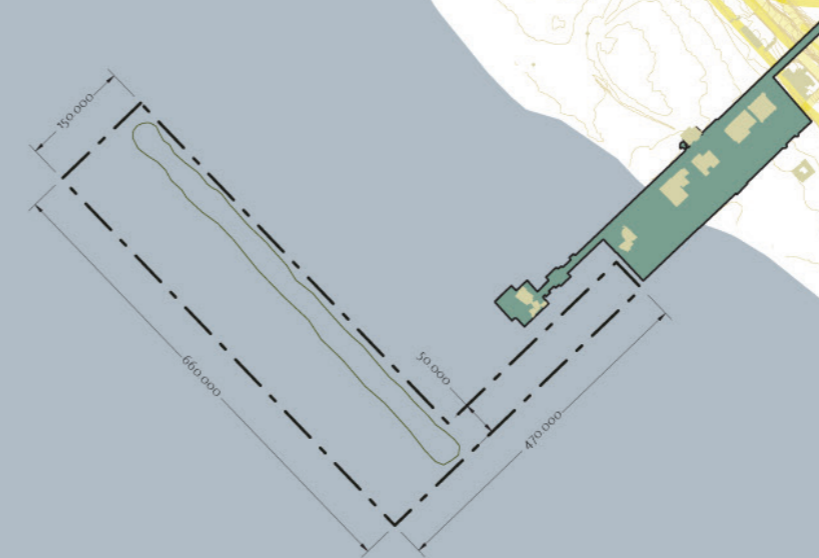
Originally envisioned as a yacht harbor, the rock-mound breakwater that can be seen best at low tide was originally constructed in 1933. The Pier's west end was expanded in 1934, and 99 yacht moorings were put in place. By the mid-forties however, the breakwater was too damaged to protect the moorings and yachts gave way to commercial fishing boats. The breakwater has continued to erode ever since.

In 1972 the entire Pier was almost demolished to make way for a 35-acre island complete with high-rise hotel and convention center. The Pier was to be replaced with a four-lane bridge to access the island. After this plan was initially approved by City Council an overwhelming public outcry and citizen activism eventually led to the saving of the Pier. Following new City Council elections in 1973, the Citizens Initiative to Preserve the Pier was passed in 1975, ensuring that it would never again be threatened. And in 1976, the Santa Monica Pier became an official historic landmark of the City.

The most recent modification is a 1986 (east end)—1990 (west end) restoration following a series of severe storms in the winter of 1983 that washed away the entire west end and badly damaged the east end.

* This history is adapted from "Santa Monica Pier: A Century on the Last Great Pleasure Pier" by James Harris with a Foreword by Robert Redford, published in 2009 by Angel City Press and the Santa Monica Pier Restoration Corporation. The book offers a great record of the Pier from its first days through the early 21st Century.

Another great resource is the nicely designed online timeline at <http://santamonicapier.org/history/>.



The design site offers ample solar, wind, wave, and tidal resources, close proximity to cultural amenities and popular attractions, high visibility, a rich site history, and the context of a city with an ambitious climate action plan.



Santa Monica's Sustainability Plan

Text courtesy of the City of Santa Monica

Santa Monica has been recognized as one of the top ten sustainable cities in the United States. The City's Office of Sustainability and the Environment is responsible for developing and implementing policy initiatives that promote local environmental, economic, and social sustainability and integrating resource management, conservation, and sustainability practices with ongoing City operations.

The Office oversees the implementation of the Solar Santa Monica program that seeks to achieve energy self-sufficiency by integrating energy efficiency and solar in most of Santa Monica's buildings, offers water efficiency programs to residents and businesses, provides assistance to the public with all aspects of green building, and provides sustainability training to residents, students and businesses.

The 15x15 Climate Action Plan can be downloaded at

http://www.smgov.net/uploadedFiles/Departments/OSE/Home_Page_Item_with_Image/CAP_Final.pdf

Published in February 2013, it was developed to meet the City's target of reducing greenhouse gas emissions 15% below 1990 levels by the end of 2015. The progress of the 15x15 Climate Action Plan will inform the next Climate Action Plan to be developed with targets for the years 2030 and 2050.

The Santa Monica Sustainable City Plan is founded on eleven Guiding Principles that provide the basis from which effective and sustainable decisions can be made.

1. The Concept of Sustainability Guides City Policy
2. Protection, Preservation, and Restoration of the Natural Environment is a High Priority of the City
3. Environmental Quality, Economic Health and Social Equity are Mutually Dependent
4. All Decisions Have Implications to the Long-term Sustainability of Santa Monica
5. Community Awareness, Responsibility, Participation and Education are Key Elements of a Sustainable Community
6. Santa Monica Recognizes Its Linkage with the Regional, National, and Global Community
7. Those Sustainability Issues Most Important to the Community Will be Addressed First, and the Most Cost-Effective Programs and Policies Will be Selected
8. The City is Committed to Procurement Decisions which Minimize Negative Environmental and Social Impacts
9. Cross-sector Partnerships Are Necessary to Achieve Sustainable Goals
10. The Precautionary Principle Provides a Complementary Framework to Help Guide City Decision-Makers in the Pursuit of Sustainability
11. Santa Monica is Committed to Sustainable Rights for its Residents, Natural Communities and Ecosystems

Read more at:

http://www.smgov.net/Departments/OSE/Categories/Sustainability/Guiding_Principles.aspx

Santa Monica Bay

LAGI 2016 is pleased to have The Bay Foundation as a project partner. One of the most important design considerations this year is the protection of the ecosystem of Santa Monica Bay. For more information about the bay, to learn about restoration and research projects, and to access reporting documents, please see the following sites:

- www.santamonibay.org
- www.healthebay.org
- www.smgov.net/Departments/OSE/Going_Local/Beaches_and_Bay.aspx
- pubs.usgs.gov/fs/2002/fs155-02/

LAGI 2016 Jurors

Senator Ben Allen

California State Senate (District 26)
Chair, California State Legislature Joint Committee on the Arts

Kevin McKeown

Mayor, City of Santa Monica

Craig Watson

Director, California Arts Council

Eric Corey Freed, RA, LFA, LEED AP

Vice President Global Outreach
International Living Future Institute

Dean Kubani

Director, Office of Sustainability and Environment
City of Santa Monica

Jessica Cusick

Cultural Affairs Manager
City of Santa Monica

Tom Ford

Executive Director
The Bay Foundation

David Hertz, FAIA

Founder and President
The Studio of Environmental Architecture (S.E.A.)

Shari Afshari

Deputy Director
County of Los Angeles Dept. of Public Works

Margaret Bruning

Director of Civic Art
Los Angeles County Arts Commission

Dominique Hargreaves

Executive Director
USGBC-LA Chapter

Elizabeth Corr

Manager Art Partnerships & Events
National Resources Defense Council (NRDC)

Jack Becker

Executive Director
Forecast Public Art + Public Art Review

Vicki Scuri

Vicki Scuri SiteWorks

Trevor Lee

Principal, Suprafutures

Laura Watts

Associate Professor
Technologies in Practice (TiP) Research Group
IT University of Copenhagen

Santiago Muros Cortés

LAGI 2014 First Place Winner

LAGI 2016 Competition Schedule

JAN 1	LAGI 2016 competition opens
APRIL 15	End of question & answer period Answers will be posted to the LAGI website. All questions must be addressed to lagi@landartgenerator.org
MAY 15	Competition closes at 23:59 (11:59 pm) GMT
JUNE	Selection & jury process
JULY	Winners & shortlist contacted
OCT 5-7	Award ceremony, exhibition, and book launch held in partnership with the USGBC LA Chapter at Greenbuild 2016 LAGI 2016 public exhibition at the Santa Monica Pier



Regenerative Infrastructures: Freshkills Park NYC,
Land Art Generator Initiative, Prestel Publishing,
ISBN: 978-3-7913-5286-2 (2013)



New Energies: Land Art Generator Initiative, Copenhagen
Prestel Publishing, ISBN: 978-3-7913-5369-2 (2014)

The LAGI 2016 publication
featuring the top 50
submissions will be released
in October 2016 by Prestel
Publishing.

Powering Places: Land Art Generator Initiative, Santa
Monica, Prestel Publishing

LAGI 2016 Submission Requirements

GENERAL CRITERIA

Your entry must not have been used in any other context, and it must not have been previously published or exhibited anywhere in the world.

The design must be kept confidential and anonymous until the results of the competition are announced.

Designs that have already been made public, are found to plagiarize any existing design, that may harm public safety, or that are found to infringe on the intellectual property rights of others will be disqualified.

If any award-winning submissions are found to fall under any of these categories later, the award will be cancelled and the prize money withdrawn.

There are no restrictions on team size and/or makeup. It is recommended (but not mandatory) that the team be comprised of interdisciplinary members so as to arrive at the most well conceived result. An ideal team might consist of an artist, an architect, a landscape architect, an electrical engineer, and a renewable energy scientist. With this year's coastal site, it may also be a good idea to consult a marine biologist, ecologist, or oceanographer (again, this is not required).

Anyone is eligible to enter the LAGI 2016 design competition. There is no fee to enter.

See Terms & Conditions for more information.

REGISTRATION

Register your team by creating an account at: landartgenerator.org/designcomp

Under Log In, click Register.

Enter your username and email address.

You will receive a password and confirmation via email.

We recommend that you register the first time you visit the site. This way you will stay informed of all LAGI 2016 competition updates via email.

If you encounter any difficulties, please email lagi@landartgenerator.org.

FORMAT

- Exactly three (3) A1 size layout boards (PDF only). A1 size is based on the international ISO 216 standard (594mm height × 841mm width).

Each layout board may not exceed 8MB file size.

Nowhere on the layout boards or written description file can there be any personal identifying information. The jury will see these boards and we must maintain anonymity of the entries. You can show your 8-character code on your boards, but this is not required.

Layout boards must be **landscape in orientation** (for consistency in jury review).

- One (1) DOC, DOCX, or TXT format file containing:
 - » a 1,200-word maximum written description (do not include any information within the written description file that could identify who the team members are)
 - » technology used in your design
 - » estimate of the annual kWh (kilowatt-hours) generated by your design
 - » dimensions and list of the primary materials used in your design
 - » a 300-word maximum environmental impact summary
- Three (3) to eight (8) JPG (300 dpi) image files (*without text*) or simple diagrams. These should be the same images used in the layout boards. Images can be any orientation and dimension, but must not exceed 20MB each in file size.

The purpose of these image files is to facilitate the production of the book with Prestel Publishing. The top 50 submissions will be published in this book for release in fall of 2016. Please note that we might contact you for more images for the purposes of publication and exhibition. CMYK images are preferred.
- Language must be English.

We recommend that you come up with a title for your artwork in the written description, but it is not required.

For examples of layout boards you can visit the below links where you will find a portfolio of submissions from past LAGI design competitions.

landartgenerator.org/LAGI2010
landartgenerator.org/LAGI-2012
landartgenerator.org/LAGI-2014

HOW TO SUBMIT YOUR ENTRY

- Teams may submit only one entry to the competition. Individuals may not be on more than one team.
- Be sure that no personal identifying information is visible on any of your layout boards, written description, or JPG images.
- Name each file with an 8-character code of your choosing, then underscore, and then the number of the layout board or image. It is very important that you follow this file-naming convention. Otherwise your entry will risk disqualification.

examples

11BB3344_1.pdf, 11BB3344_2.pdf, etc.

for your layout boards

11BB3344.doc

for your written description

11BB3344_1.jpg, 11BB3344_2.jpg

for your text-free images or diagrams

(do NOT use the example code above)

- Go to: landartgenerator.org/designcomp and log in. You will be required to log in before you can access the upload page.
- Click "Upload Submission"
- Upload your files using the online form.

Locate each of your PDFs, JPGs, and your text file on your local computer by clicking "Browse" in each upload field. Click the "Upload" button and then proceed to the next field.

Make sure that your email address and all other team information is correct, and that all required fields are completely filled in. This is the information we rely on for publications.
- Please be patient while each file upload is in process and do not navigate away from the page.
- When finished, you will have the opportunity to continue to a confirmation page where you will find links to all of your files as well as a summary of the team information that you have provided. You will also receive an email with this same information.

DEADLINE

Submissions will be accepted until Sunday May 15, 2016 at 23:59 (11:59 pm) GMT.

ANSWERS TO FREQUENTLY ASKED QUESTIONS

LAGI 2016 is open to everyone (students, professionals, and others).

There is no fee to enter as we strongly believe in creating an open and accessible platform for creativity and innovation. *Donations are welcome and help make the project possible (tax-deductible in US).*

We encourage interdisciplinary teams comprised of artists, architects, landscape architects, engineers, scientists, designers, and others. However, we also recognize that great solutions can come from individuals working alone or in smaller teams.

All competition questions must be addressed to:

lagi@landartgenerator.org



LAGI 2016 Terms & Conditions*

The Land Art Generator Initiative competition is a project of Society for Cultural Exchange, a U.S. 501(c)(3) non-profit organization. The award money is a cash payment to the winning team and is not related to costs of construction of the work. There is no guarantee of any of the projects being constructed.

Participants cannot reveal their identity or share any images or ideas pertaining to their LAGI 2016 design submission to any member of the LAGI 2016 jury, LAGI 2016 competition partner organizations, or LAGI 2016 administrative team. By submitting a proposal, each Participant automatically affirms compliance with the competition requirements, rules and guidelines and agrees that any violation will result in immediate disqualification.

The submitted design remains the property of the Participant. Participant shall be credited either by collective team name or by individual names at their discretion in publications and exhibits.

By participating in the competition, all participants authorize Society for Cultural Exchange to publish and exhibit all the designs (including project data submitted)—waiving compensation—at exhibitions and events and/or to use them in and promote them to any publications.

By submitting a design, the participant agrees to provide Society for Cultural Exchange with the right of first refusal to the exclusive use of the design for the purpose of exhibition, publishing, and promotion.

The Participant agrees to allow Society for Cultural Exchange to use the submitted design in discussions and negotiations with developers, planners, funders, and municipalities in an effort to have the design constructed.

Participants shall have obtained all necessary permission or approval for using any third party's text, graphics, data, or other materials in their own entries. Participants' entries shall not contain any irrelevant third party names or logos.

In the event that Society for Cultural Exchange exercises the option to use the rights for production (construction of any qualified entry) on an exclusive basis and without time limitations, Society for Cultural Exchange shall enter into an agreement with the design team, the terms of which shall be determined entirely by that agreement.

*Complete Terms & Conditions can be found at: landartgenerator.org/designcomp

All competition questions must be addressed to:

Robert Ferry & Elizabeth Monoian
lagi@landartgenerator.org
 +1 509 961 6237