PROJECT INTRODUCTION

What would a utility-scale renewable energy project for Glasgow look like if the design process was led by artists, architects, landscape architects, and urban planners, working in collaboration with engineers? How would such an installation relate to the community?

The Land Art Generator Initiative (LAGI) open competitions have created a new portfolio of ideas for cities and urban landscapes by providing a platform for interdisciplinary teams to conceive of renewable energy power plants as creative placemaking opportunities for public space that bring added cultural value to the neighbourhood and the city in addition to carbon-free electricity.

As we transition to post-carbon economies and sustainable infrastructures become more prevalent, there is an opportunity to celebrate these new technologies as landmarks and destinations for recreation and education. Power plants designed as public art can help demonstrate a city’s commitment to development in harmony with the natural world, allow electricity generation in cherished places that would not otherwise be amenable to utilitarian installations, point the way to greater energy democracy, and inspire the public about the promise of our sustainable future.

LAGI Glasgow will involve Glasgow-based practices partnering with overseas teams who have participated in past LAGI open competitions (UAE 2010; NYC 2012; Copenhagen 2014) to develop new ideas for clean energy as an integral part of the regeneration of Port Dundas and the landmark Dundas Hill site.

GLASGOW CONTEXT

Glasgow is Scotland’s largest city and the third largest in the United Kingdom. The city is administered by Glasgow City Council with the municipal headquarters, the City Chambers, situated in George Square.

The City Council works with partner agencies, public sector organisations, educational institutions and the private and voluntary sectors to raise the profile of the city, regenerate areas and make it an attractive and high quality place to live, study, work, visit and invest in.

Development and Regeneration Services take the lead role in Glasgow’s development and work with partners and key stakeholders to develop and deliver the type of actions that will ensure the continued regeneration of the City.

Sustainable Glasgow aims to make this City one of the greenest in Europe. The Partnership’s diverse projects are improving quality of life in the city, boosting the economy and protecting the environment.

They cover everything from the installation of LED street lights and electric car charging points to the creation of renewable energy schemes and Green Jobs. The council-led initiative was formed in 2010 to make Glasgow a world-leading centre for sustainable policy, innovation and action.

It has partners from housing, communities, business, universities, enterprise and education.

For more information about Green Glasgow and Glasgow’s Green Year: From Steam to Green, visit http://www.greenglasgow.com.
PORT DUNDAS & DUNDAS HILL

Port Dundas is located within the Glasgow Canal Regeneration Partnership’s area. This Partnership was formed between Glasgow City Council, Scottish Canals, BIGG Regeneration, and ISIS Waterside Regeneration with the aim of regenerating and transforming the canal to a vibrant local and city destination. The outcome of the 2014 planning charrette held to agree the vision for Port Dundas is included as a supplemental document to this brief.

Dundas Hill (or 100 Acre Hill as it was first known) overlooks the city centre and is a central part of the plans for Port Dundas. It is currently the focus of a major regeneration project led BIGG Regeneration, itself a JV between Scottish Canals and the Igloo Regeneration Fund. The aim of the partners is to deliver a residential led, creative mixed use place—one that will foster and support the further growth of creative industries and urban sports pioneers in the neighbourhood, in an approach that has the potential to become ground-breaking for regeneration in Scotland.

Indeed, Scotland has set world-leading targets for renewable energy and the transition to a low carbon economy, and the LAGI Glasgow 2015 project will demonstrate the important role for designers, architects, urban practitioners and artists to imagine ways for utility scale renewables to be iconic as well as practical, integrated into communities as well as a landmark for the City's transition from Steam to Green.

More about the site, the surrounding context, and the vision for its development can be found in the following reference documents, which are made available by BIGG Regeneration:

• Port Dundas Strategy Vision
• Dundas Hill Urban Design Brief (used to initiate the master planning process)
• HTA Concept Design Report Parts 1 & 2

THE SITE BOUNDARY

Rather than present one hard prescriptive boundary line within which a LAGI Glasgow artwork proposal must be contained, this Design Brief takes a descriptive approach to the boundary definition. The Site Boundary Supplemental Document (in both CAD and PDF formats) provides four boundary lines, each with its own purpose:

• Glasgow City
  LAGI Glasgow proposals must be responsive to the context of the City as a whole and the aspirations of its people.

• Neighbourhoods Boundary
  Consider the land forms, existing urban context, and connections to and from this more regional boundary condition that exists north of the M8 and includes Applecross, Speirs Locks, Port Dundas, Sighthill, and other neighbourhoods. We encourage input from residents of this area into the concept generation of your proposal.

• Dundas Hill Regeneration Property Boundary
  This is the “red line” in the UD Brief and represents the area of redevelopment being managed by BIGG Regeneration. This is the area within which land art generator artwork construction(s) may be proposed. You may propose interventions outside of this boundary, but with the understanding that there may be no site control for their implementation. Ideas for sites outside the property boundary should be brought to the attention of the LAGI Glasgow Consortium as soon as possible prior to the submission of a Phase 1 concept.

• LAGI Glasgow Initial Recommendation Focus Area Boundary
  Finally, this boundary line represents areas within the property that perhaps lend themselves well to public art activation and intervention. This particular boundary is informed by the most recent HTA urban design illustrative proposal and by the topography of the site (leaning heavily on those parts of the site that slope steeply to form the terraced conditions). It is a recommendation only. Should it suit your overall vision, you are encouraged to propose construction outside of this boundary (while remaining within the “Property” boundary). Regardless of the location, the Consortium expect the LAGI to improve the viability of the wider regeneration proposals, by adding value to the emerging proposals for the place.
THE CONTEXT

All of the site boundaries can be seen in this map, which provides a quick glance at the site in context. Its importance relative to the City of Glasgow cannot be overstated. The proximity to the City Centre, the topographic elevation, the connection to water, and the rich history of the site make this a rare and valuable opportunity to create something with a lasting and positive legacy—a message to future generations that the people of Glasgow care deeply about the environment and about sustainable human wellbeing.

This map is available as a supplemental download document in both DWG and AI formats.
Design Criteria

A successful proposal must:

1. Consist of a three-dimensional sculptural form that has the ability to stimulate and challenge the minds of visitors to the site. The form may be singular/contiguous or may consist of multiple forms that are interrelated while dispersed throughout the allowable design area and linked conceptually in some way. The work should aim to solicit contemplation from viewers on broad ideas such as the historical context of Glasgow and its region, ecological systems, human development and habitation, energy resource consumption and production, and/or other concepts at the discretion of the design team. Keep in mind that the audience for the work may number in the thousands per day and that the artwork is meant to attract people to the site from the surrounding neighbourhoods and the City Centre.

2. Convert natural energy into usable energy (e.g. electricity) at the site. The artwork(s) must have the ability to store, and/or transform and transmit the energy generated to a grid or point of distribution to be designed by others. Consideration should be made for artfully housing the required equipment (balance of system components) within the project boundary and restricting access to those areas for the safety of visitors to the site.

3. Engender a sense of civic pride and stimulate thoughts about the City of Glasgow and the history of the site. The proposals should generate a strong sense of ownership by Glaswegians and serve as a point of reference and learning for visitors and tourists. Proposals should be well informed by a thorough understanding of the site and its broader context.

4. Not create greenhouse gas emissions and not pollute. The work must not impact the natural surroundings negatively. Each entry must provide an environmental statement as a part of the written description. The statement should include a list of any forecast effects of the project on the natural ecosystem and should propose a mitigation strategy to address them.

5. Be pragmatic, constructible, and mindful of long-term operations and maintenance. It is recommended that proposals employ market-ready renewable energy technologies such as those that utilize solar and wind power. Other technologies, such as geothermal, WTE, biofuel, and innovative energy storage and energy efficiency systems should also be considered and pursued if viable within the overall development strategy and financial model.

Please choose a technology that has a guaranteed operational life of 25 years or more. 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 Phase 1 design entry. Whatever technologies are incorporated, it is critical that they be visible and/or interpreted in some way for the public who can be inspired by them and learn from them.

6. Be safe to people who will view it and for urban wildlife. For example, if wind technologies are incorporated, turbine blades must not pose a threat to the safety of airborne wildlife. Consideration must be made for viewing/interpretation areas and boundaries between public and restricted areas.

7. Demonstrate through diagrams and images how the artwork: relates to the context by providing key views and opportunities for being a landmark; integrates with the public realm (diagram urban design relationships of the site and surrounding canal-side neighbourhood); is designed for the particular place to establish identity and distinctiveness; relates to the community moving onto the site as part of the regeneration; adds visual quality and long term value to the place; and above all, captures the pioneering spirit of the project.

8. Follow the urban design framework for the site (reference the Port Dundas Strategy Vision and the HTA Concept Design Report Parts 1 & 2), and respect the boundaries of the LAGI Glasgow Site Boundary Plan.

9. Be informed by the relevant Local Development Plans, including Glasgow City Plan 2 (adopted December 2009) and the proposed City Development Plan (2013) (approved by GCC’s Executive Committee in May 2014 and currently with the Scottish Government’s Directorate for Planning and Environment (DPEA) for final consideration). The proposed City Development Plan contains two overarching policies which should be considered: (1) The Placemaking Principle and (2) the Sustainable Spatial Strategy. The Placemaking Principle promotes a holistic approach to placemaking that considers the area’s context, and balances the range of interests and opportunities to create multiple interconnected benefits through a design led and collaborative process.

10. Provide a conceptual business model for income generation, operations, and maintenance, including a RIBA Stage 2 Concept Design level estimate of fabrication and installation costs. Estimate should also include a summary of annual energy output in MWh, and the embodied carbon of the installation in grams or tons CO2e. The conceptual business and operations outline will show that the proposal has thought through these practical considerations, but is expected to be only a rough order of magnitude estimate at this stage.
SUPPLEMENTAL DESIGN INFORMATION

The following information is available as a download at http://landartgenerator.org/glasgow

- Port Dundas Strategy Vision
- Port Dundas Urban Design Brief (used to initiate the master planning process)
- HTA Concept Design Report Parts 1 & 2 (outcome to date of the master planning process)
- Local Development Plans (referenced in Design Criteria #9)
- Glasgow Weather Data Summary
- Photos of the site (teams will also provide their own documentation)
- Site Boundary Supplemental Document in CAD format
- Site Boundary Supplemental Document in PDF format

BUDGET AND DELIVERABLES

Phase 1: The phase pertaining to this Design Brief

Three teams comprising Glasgow-based practices and overseas partners will each receive a stipend/honorarium of £7,500. The travel and accommodations for the overseas partners will be covered by Phase 1.

The output of this phase is a concept design demonstrating the idea and an outline of the business model. Deliverables must follow the submission requirements on the next page.

Phase 2: Detailed Design (chosen proposal from Phase 1)

We expect the selected project to undertake a Detailed Design stage with an estimated budget of up to £50,000 to develop the project to production including:

- fabrication drawings;
- costings and programme;
- appropriate prototyping and testing plan;
- consultations;
- criteria for appointing fabricators and installers with a short list;
- business plan for operations including income and maintenance expenditure.

The Land Art Generator artwork should make a net contribution to the ongoing management of the wider sustainability and cultural place-making features at Port Dundas, (e.g. the surface water management system, temporary and permanent urban sports and cultural projects).

Phase 3: Fabrication/construction and installation

We expect the production of the Land Art Generator to cost between £800,000 and £1 million. This figure is nothing more than a guide. Phase 1 submissions should consider likely funding sources (fundraising will be required to deliver this stage of the project), the potential for return on investment, and relevant precedents and models.

SUBMISSION REQUIREMENTS FOR PHASE 1

1. Four (4) A1 size presentation boards in landscape orientation and submitted as four separate PDF documents.

2. A written description of no more than 5,000 words submitted as one DOC or DOCX file. The written description must cover the following aspects of the proposal but is not limited to these:
   - Public Art Concept
   - Placemaking Strategy
   - Design Process
   - Technology and Infrastructural Components
   - Business Model and Funding Strategy
   - Outline budget for detailed design phase with hourly rates
   - Environmental Impact

All files (four PDFs and one DOC) shall be compressed in one ZIP file and sent to: lagi@landartgenerator.org by no later than midnight GMT on January 18, 2016 using WeTransfer.com (or a similar file transfer method).

PROGRAMME

Phase 1

- 27 August 2015: Launch of Local Practices Competition
- 14 September: Submissions received from Local Practices
- 23 October: Selection of Local Practices Announced
- 13 November: Glasgow-based/Overseas Partnerships Agreed
- 19–21 November: Design Charrette
- 18 January 2016: Concept Design proposals delivered
- 12 February: Technical review completed
- 18 March: Selection Panel meets
- April: Announcements Made
- June: Public Exhibition at Lighthouse

Phase 2

- Spring 2016
LAGI Glasgow Design Brief: Phase 1 | Concept

www.landartgenerator.org/glasgow

PARTNERS

Land Art Generator Initiative
By providing a platform for creative inquiry into the aesthetics of renewable energy, LAGI seeks to create broader acceptance and versatility to clean energy generation systems that will lead to their greater proliferation into buildings and public spaces. Land Art Generators are aesthetic renewable energy infrastructure: public art installations that have the added benefit of large-scale clean energy generation. Each proposed work is designed to contribute clean kilowatt-hours to the municipal electricity grid.

LAGI has held four idea-based competitions, bringing together hundreds of teams to develop ideas for aesthetic solutions to renewable energy for sites in the United Arab Emirates, New York City, Copenhagen, and Santa Monica in 2010, 2012, 2014, and 2016 respectively. LAGI was founded and is co-directed by Elizabeth Monoian and Robert Ferry.

LAGI was invited to bring the project to Glasgow by the City Council at the instigation of ecoartscotland and as a result of Creative Carbon Scotland’s Green Teas(e) — part of the European Green Arts Lab Alliance project. The Dundas Hill site was suggested as one of a number of potential sites by the City Council, a lead partner in the Glasgow Canal Partnership. Scottish Canals/BIGG Regeneration welcomed the suggestion and have supported the evolution of the project. The site is ideal for a research and development process following on from the outcomes from the a Charette process undertaken in late 2014.

Glasgow Canals Partnership (http://www.glasgowcanal.co.uk/who-we-are) includes: Glasgow City Council is the local authority for the area. This project forms part of a number of key focuses including the urban regeneration aspirations of the north of the city; economic development initiatives supporting the creative business sector, the city’s Sustainable City priority and transition to low carbon and Glasgow’s Green Year 2015, a major initiative, a legacy from Glasgow’s bid to be European Green Capital in 2015 (http://ec.europa.eu/environment/europeangreencapital/index_en.htm).

Scottish Canals
Scottish Canals has a demonstrated commitment to regeneration using culture and public art. Scottish Canals have commissioned public art for nearly 20 years and have also redeveloped buildings and neighbourhoods for cultural use (including being one of the partners behind the Whisky Bond, with Glasgow Sculpture Studios, and the proposed new HQ for National Theatre of Scotland).

Glasgow City Council
Glasgow, with a population of around 600,000, is Scotland’s largest city and commercial capital of Scotland. The city is administered by Glasgow City Council with the municipal headquarters, the City Chambers, situated in George Square.

The City Council works with partner agencies, public sector organisations, educational institutions and the private and voluntary sectors to raise the profile of the city, regenerate areas and make it an attractive and high quality place to live, study, work, visit and invest in.

BIGG Regeneration
BIGG Regeneration is jointly owned by Scottish Canals and the igloo Regeneration Fund. This fund is a partnership of pension, life and charity funds, managed by Aviva Investors, which invests in sustainable urban regeneration across the UK.

ecoartscotland
ecoartscotland is a focal point for art and ecology. We profile interesting and significant research, policy and practice, including projects by Scottish and other artists, designers and architects. ecoartscotland comprises a blog, a library, publishing occasional papers and participating in exhibitions including the Edinburgh Art Festival, Edinburgh International Science Festival. We have worked with North Light Arts in Dunbar and critical tourism projects in the Scottish landscape.

Glasgow Life/Velocity
Art for a changing city. Initiated by Glasgow Life, Glasgow City Council, Creative Scotland and Clyde Gateway Urban Regeneration Company, VELOCITY seeks to re-imagine, repair and reconnect the physical and social fabric of the city in the post-Games context.

Creative Carbon Scotland
Creative Carbon Scotland is a partnership of arts organisations working to put culture at the heart of a sustainable Scotland. We believe cultural and creative organisations have a significant influencing power to help shape a sustainable Scotland for the 21st century.
FOR MORE INFORMATION ABOUT LAGI GLASGOW
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