**Narrative Statement: Poet of Masdar**

Inspired in part by nature and also by new developments in graphene technology, The Poet of Masdar delivers colorful, playful high energy that fits its context and that can also be deployed in smaller (or larger) installations around the world. The Poet of Masdar endeavors to achieve the goals of the design brief as follows:

The Abu Dhabi coast is one of change: sea port activities and cultural interchange with people from around the world make it, and Masdar as its highlight, a bountiful place of hospitality and generosity. The Poet of Masdar embraces these international elements and harmonizes new technology with cultural roots in an installation that is simultaneously grounded and soaring.

The Poet of Masdar is a high capacity installation of 5,486 panels capable of producing 2,386 kWh. It measures 70m at its narrow end and 88m at its wide end, by 288m on its long side. It spans the road. Please see the attached spreadsheet for a breakdown of the numbers associated with the installation.

This is a new urban plaza, but one that builds upon ancient ideas of pathways, beckoning light and cooling shadows, as well as heights and vistas as places of inspiration and contemplation. It offers multiple ways in, and can be viewed and appreciated from any angle, whether on the ground, coming from an office building nearby, from within a building adjacent or distant, and even---perhaps with greatest impact---from the air. The Poet of Masdar is for everyone.

In conceiving this project, we were influenced by the writings of Rumi. We believe this to be a first-of-its kind concept, and we are pleased to deliver it to Masdar.

The Poet of Masdar offers a safe, open and inclusive space for all. Even in its most dark recesses and shaded corners, light penetrates, and there are multiple ways in an out.

It is a barrier-free installation, with a service staircase for maintenance that leads to the atmospheric water harvesting canopy. If desired, the site could be installed with a Lula-type lift or outdoor elevator, with a second spiral staircase around it, and if handrails were also installed, then the top of the NEST Arbour could be made into a viewing platform. We felt this was beyond the reasonable scope of the installation and we edited it out from our design for reasons of cost and added project complexity. If it is desired, it can certainly be discussed and engineering into being at a future point in time.

The Poet of Masdar, while holding some geometries found in Islamic architecture such as the octagonal NEST Pavilion, also offers a multicultural hybrid of architectural and spatial interpretations, including a nod to the Platonic solids of Ancient Greece, the simplicity and variety of columnar forms of Ancient Rome, and the curvilinear and organic traits found in much contemporary architecture around the world. Although the sinuous form of the installation is bird-like, it is also influenced by tree geometry and river flow, namely the mighty South Asian Ganges River and its tributaries. As such, The Poet of Masdar is essentially international.

The Poet of Masdar was conceived as one who visits and returns to the city in an annual migration, and yet who leaves an imprint on the space. On seeing the space and the design program requirements, the first image that emerged in our design process was that of a bird, one who soars high above yet leaves a colorful trail of light, feathering the open plaza below with its power.

We offer this story, of the Poet of Masdar:

Welcome, Poet of Masdar, to the city of the future. We welcome your embracing vision and words of kindness. We offer our open plaza space for your nest, where we are pleased to gather in the penumbra of your wings.

Your technology intrigues us. The N (Nano) and E (Electrode), the S (Solar) and T (Transparency) come together as NEST, or Nano Electrode Solar Transparency. You come with a future vision of a dichroic glass film enmeshed between panels of clear glass, topped with a delicate-looking but very strong pattern of applied graphene, connected to electrode contacts. We have not seen such a vision before, but we know that the technology can work well, because the components are already proven in the laboratory and soon, in the marketplace.

We are intrigued by your use of graphene. Your NEST panels feature essential geometries of Frangipani (Plumeria), Citronella, and Hibiscus. The graphene delivers the story. Tell us more.

*I use graphene in different ways.*

* *It is valuable for it solar transparency, gained through its thinness rather than its thickness.*
* *It is bound with recycled aluminum to make a stronger, lighter weight structural material.*
* *It forms an applied layer as part of the NEST solar panels. It can be configured as you wish: to inspire flowers and essences, and more.*

We are interested in the dichroic film that appears on your feathers. It is playful!

*I use an achievable method of sandwiching a layer of dichroic film between two layers of glass, creating a laminated dichroic panel system that:*

* *Delivers maximum solar energy with minimal disturbance of overheating and refraction from dust collection, and has a stabilized core temperature;*
* *Retains its resilience even after a strike by dust or debris, thereby holding the entire NEST together in integrity;*
* *Can be maintained and enjoyed from above and below, offering a diffuse and healing chromatherapy light.*

And you come with a walkable spine. How is it that we can walk your length? And see through to below, while energy is simultaneously generated from within your form?

*My bird span hugs the coast below, while geometry shows us its subtle flow. What could be more timeless than a circle and a square? A bird’s embrace of land below, coastlines emerging and receding, water aflow. Skies above with energy for all to share. This is the vision I bring to bear.*

We understand your perspective…

*I am part sea bird, part land hunter, and I accomplish a graceful transformation through a classic device: I invite the viewer to enjoy a new perspective and to engage all of the senses. My perspective is not yours, and yours is not your neighbor’s. But, we can gather to enjoy a new perspective together. In this way, I bind nature and culture to the future.*

We honor your flight, Poet of Masdar. We appreciate your message of kindness and we wish to hear your words while we bask in in the shade of your wings.

Poet, if we want to build your vision, how may we best accomplish it?

And the voices in the background dim to a low hum, as the Poet answers:

*You must visualize your sea-cross-section and plan in advance for tides. Water levels may change, but also, tidal range may increase. This is a beautiful opportunity for sea-change-watching. If you build perches, all who visit will be well-placed to witness its powerful beauty, and your well-invested infrastructure will survive the changes, as it can be built port-like, ready for saline advances and retreats. By doing this, with a further investment in your infrastructure, you will realize the value of your installation.*

**Environmental Statement: Poet of Masdar**

It is estimated that the materials required to construct the Poet of Masdar (excluding geothermal energy pile technology, atmospheric moisture harvesting, food and flower growing, irrigation, site furnishings, etcetera) will align as follows:

* Graphene-enhanced Recycled Aluminum
* NEST Panels (Nano Electrode Solar Transparency Panels):
  + Dichroic Film
  + Glass
  + Graphene
* Graphene-enhanced Recycled Aluminum
* Low Cement Concrete
* Sustainable Glulam Wood

All components are intended to be site-fabricated and delivered by truck. A standard construction crane can be used on the site as needed. Pile driving for energy piles and the creation of the piers employs low carbon cement concrete. Aluminum is recycled, and is graphene-enhanced for greater structural strength. Sustainable Glulam is specified.

One of the reasons that the Poet of Masdar is such a high value installation is that its construction costs are much lower than the allocated estimate of $3/kWh for power generation. Its design is predicated on the understanding that graphene technology panels, while not commonly available yet on the market, can be produced for about $0.55 USD.

Another reason is that its massive structural piers perform a triple duty, that go beyond the guidelines of the project: they also supply geothermal energy through combined energy pile technology, and they house atmospheric moisture harvested water in tanks, as piped down through the glass atmospheric water harvesting canopy that is central to the concept of the Poet of Masdar.

Additionally, since the infrastructure is shared through multiple Masdar agencies, it is assumed that construction costs can be divided among the parts of work that are out of the scope of this public art installation project.

