The Sphere - Expo 2017

Astana, Kazakhstan

Lindner

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Project Description

More than 100 countries and international institutions participated at the World Expo with focus on "Future Energy" in the Kazakh capital of Astana. A 24 ha area is filled with the Expo´s presentation of future ways of living and measures for worldwide sustainability. Amidst of various theme and country pavilions thrones the pavilion of Kazakhstan "The Sphere": an oversized spherical construction from steel and glass with a diameter of 80 m and a total height of 100 m. The pavilion is probably the largest closed sphere that was built so far. It houses the exhibition of Kazakhstan as well as the "Museum of Energy" and large viewing platforms within the glazed facade.

On the levels above the public areas, the construction opens to make way for a wind channel that houses 2 wind turbines, each with a diameter of 6m. The so-called scoop is separated with a cable net and cladded with insulation glass and integrated PV modules. The majority of the facade area of the sphere is also cladded with insulation glazing. Only at the conjunction between the sphere and its plinth building, a single glazing was chosen. The design of the entire cladding was realized by Lindner Steel & Glass, Business Division of Lindner Fassaden GmbH. As to the secondary steel structure, Lindner Steel & Glass was additionally responsible for the production and installation.

General

Building Type	Exhibition, Assembly Rooms
Company Division	Lindner Building Envelope GmbH & Lindner Fassaden GmbH
Completition	2017
Client	EXPO 2017 - Future Energy

Architect | Adrian Smith + Gordon Gill Architecture

Completed Works

- **Facades**

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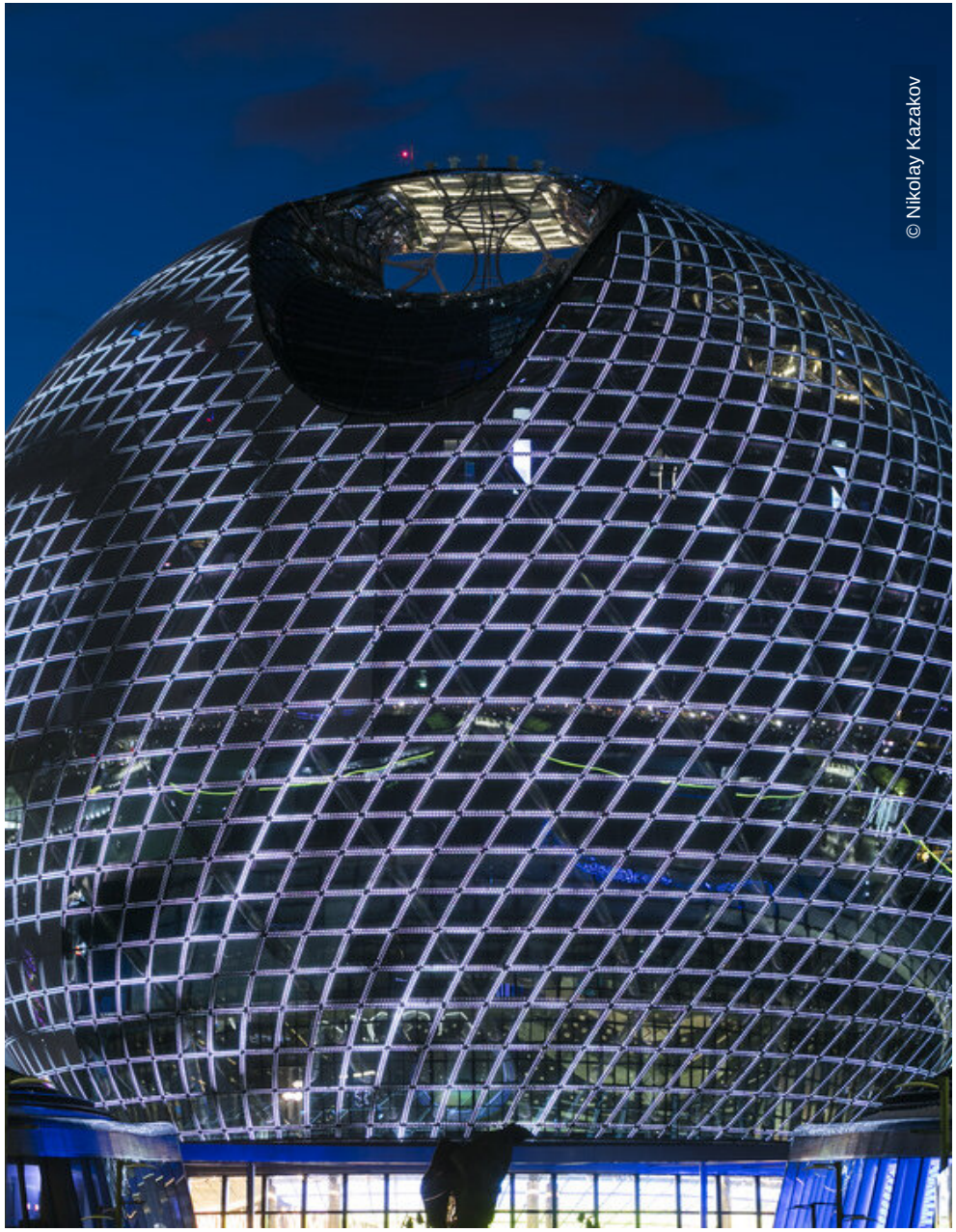
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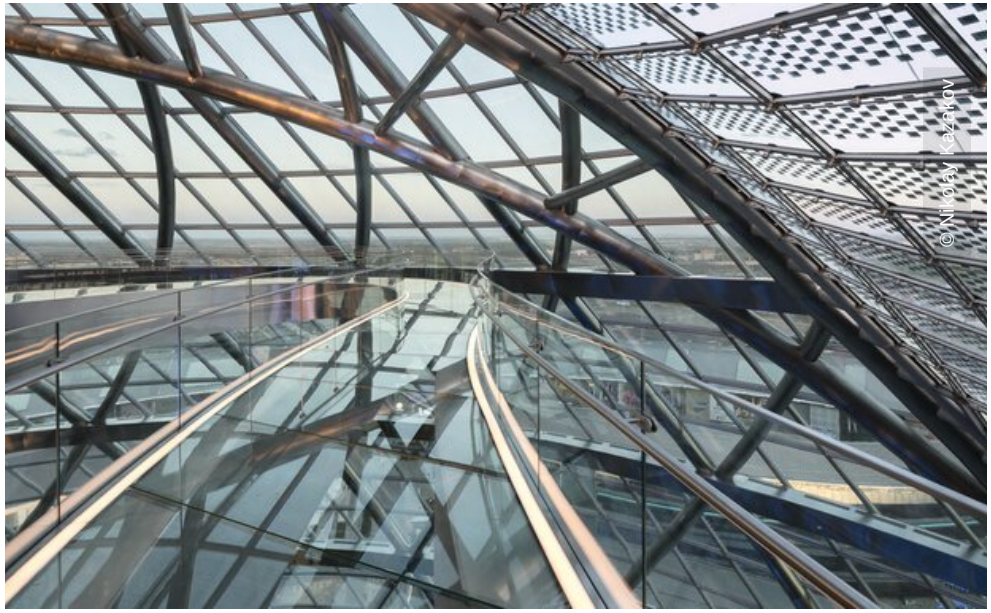
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