Tadawul Tower:
Japan-ness in the Middle East

Nikken Sekkei Ltd.,

Work
Tadawul Headquarter Tower

Client
Tadawul (Saudi Stock Exchange Co.)

Location
King Abdullah Financial District (KAFD)
Riyadh, Kingdom of Saudi Arabia

Project Year
Design: 13 months (Sep, 2010 ~ Dec, 2011)
Construction: 29 months (Sep, 2012 ~ Jan, 2015)
Completion date changed to the end of 2015

Architecture and Design
Nikken Sekkei Ltd.,

Chief Architects
Takamori Yamazaki (Project Chief)
Takehito Hioki (Project Responsible)

Project Team
Architecture: Takamori Yamazaki, Takehito Hioki, Jan Henckens, Kimihiko Ikeda, koushi Nakamura, Daiji Chikuba, Nao Sakamoto, Aya Yanagisawa, Hiroyasu Kanamitsu, Hyonsun Paku, Tomoaki Sugimura
Structure: Nobuyuki Mori, Hiroaki Murakami, Masanori Tasaka, Shinji Komatsu, Keisuke Tanigawa, Nadolny Kevin, Kazunari Torigoe
Electrical: So Takizawa, Jun Kuno, Kyousuke Fujii, Motoki Anzai
Mechanical: Iwao Hasegawa, Ken Miyushi, Kouichi Masuda, Tooru Yoshida, Megumi Horii
Interior: Kaoru Tomozawa, Yugo Fujita, Tasunori Ito
Landscape: Tetsuya Nemoto, Michiko Koori
Construction (Koumu): Naohito Kouji, Shin Nakagawa
Acoustic: Yoshihide Shiba, Ami Aoki
Design Supervision: Takehito Hioki, Hiromi Hayashi
Project Management: Jan Henckenss, Ali Ganjehlou, Fadi Jabri
Client Relation: Fadi Jabri

Building Management
Tadawul Real Estate Co., (TREC)

Size and total area
Site Area: 5,166m²
Building area: 3,951m²
Total floor area: 138,332.18m²
Floor: 41 aboveground, 5 underground
Height: 200 m

Additional Functions
Local Architect: Saudi Diyar Consultants (SDC)
Contractor: Samsung C&T Corporation Saudi Arabia Contracting & Construction Enterprises Ltd

Image credits
Nikken Sekkei Ltd.,

"More than creative" is the corporate vision of Nikken Sekkei (Nikken) - a Japan-based comprehensive and multi-disciplinary Architectural & Engineering Design consulting firm, one of the world's largest and oldest (founded in 1900) - which recently designed the new Tadawul Tower in Riyadh, Kingdom of Saudi Arabia. This vision highlights the commitment of Nikken to designing the entire life cycle of their buildings, over 20,000 projects in more than 40 countries and 50 cities worldwide.

Tadawul Tower is conceived to be an iconic building, exhibiting an architecture of timeless elegance. It will host the Saudi Stock Exchange, which include companies with a combined worth of about $319 billion. The project site is located in the heart of the King Abdullah Financial District (KAFD), which is planned to become the largest financial centre in the Middle East. In 2010 Nikken won the Architectural Design, Structural & MEP Engineering and Design Supervision Contract for Tadawul Tower in an international competition, out of 32 prequalified firms. The client requested a "state-of-the-art, world class design, in a recognizable and sustainable high-rise tower". Nikken's design was selected due to its "simple yet elegant, dynamic yet distinguished, modern yet timeless design and the integrated design approach".

There is a code hidden behind this iconic and elegant shape: it morphs, from the rectangular plan of the basement, to the pentagonal shape of the top. This geometric virtuosity creates an extremely dynamic appearance, which continuously varies according to light, perspective and distance. One of the requirements of the competition brief was to have a faceted design. Achieving this goal - creating a harmonic whole together with the other buildings, while keeping the tower recognizable as an iconic building - was one of the biggest challenges for the designers. This issue was solved in a smart and magnificent way, mainly through a detailed study of the sightlines and the building massing. The final result is a tower in conversation with the surrounding buildings, creating a sense of place and an urban “crown” for KAFD, while keeping its own identity. >

Another request was to have a pleasant public realm. The solution came from the concept of “wadi”, an Arabic term referring to a valley that contains impermanent waters. This concept was deployed especially in the interior design by creating two urban oases in the tower. The first - Tadawul Forum, raised 15 meters from the ground – is conceived a sort of plaza, to host informal meeting or a casual break. The second – Sky Lobby, a tall space located at the top of the tower – is a gathering place for the workers, with office spaces perched above like the clouds above the desert.

Communicating information is one of the most important features for the Stock Exchange building typology. This virtual presence can interact with the physical presence of the building, transforming it into a living organism. In the Tadawul Tower the information will be transmitted through the use of light. The outputs of the Stock market will be converted into an LED grid, which can vary in color, brightness or direction of light according to market movements, specific events or information flows. Furthermore, this system can reproduce the variation of natural light - for instance synchronizing the façade lighting with the transition from sunlight to dusk - thus creating a strong harmony with the natural environment.

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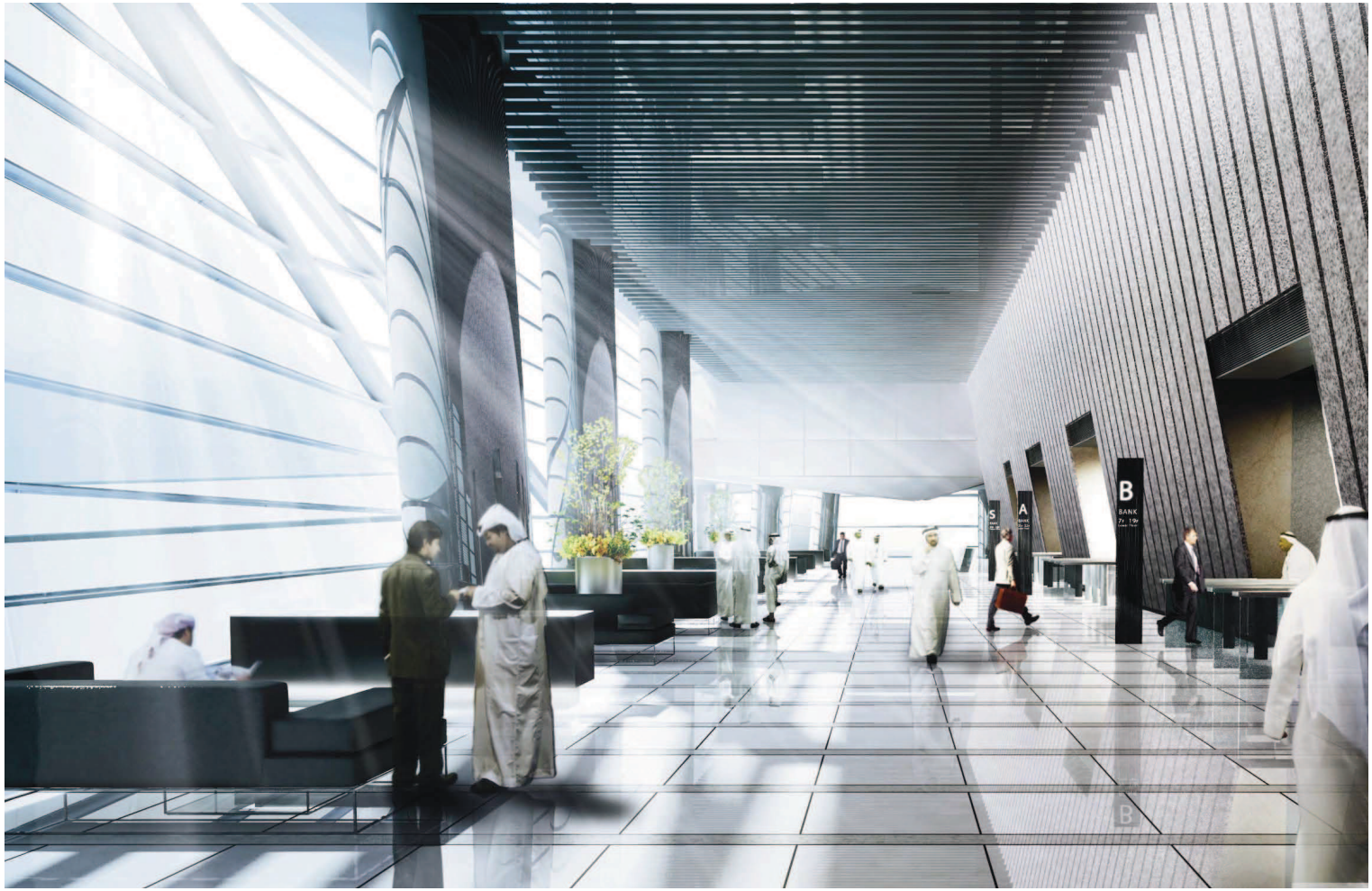
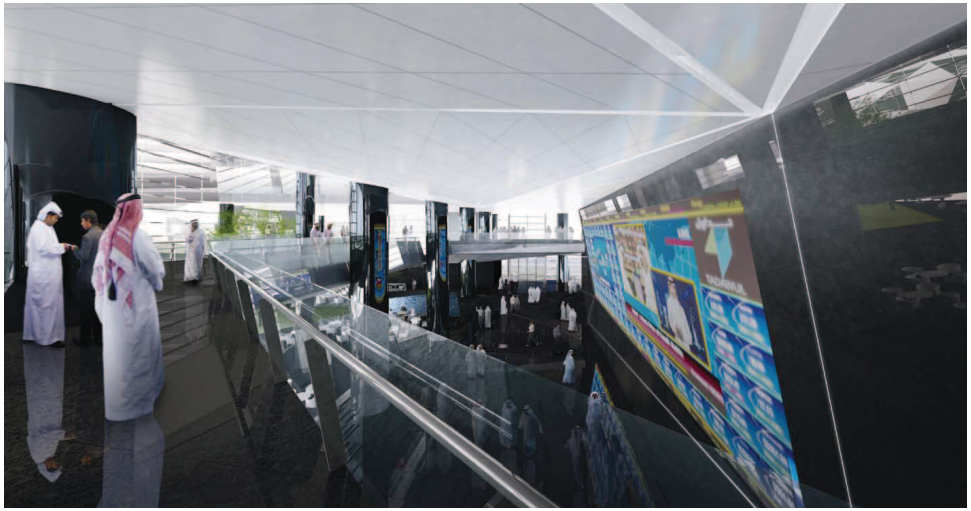
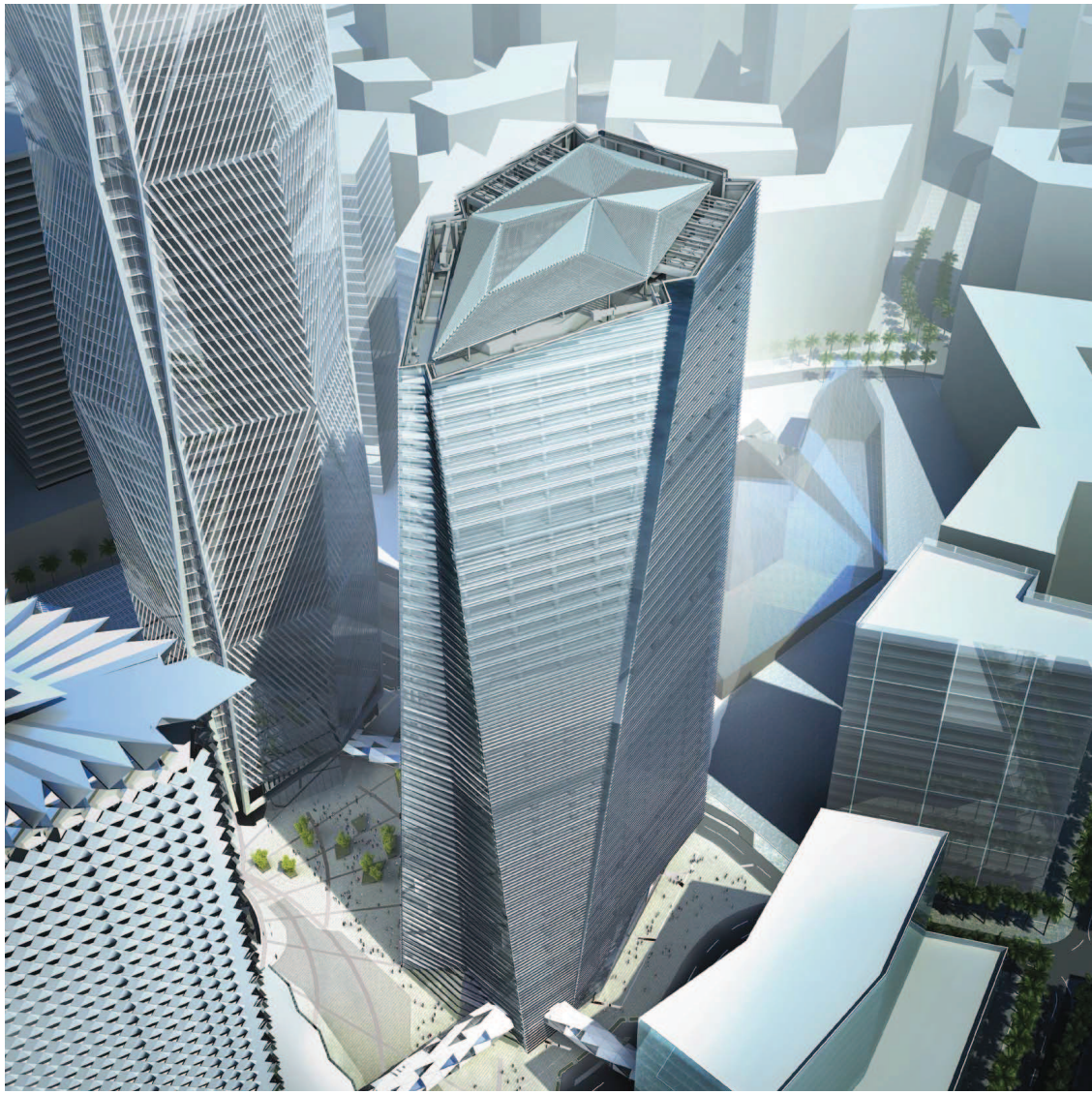
This project has been designed to achieve LEED Gold Certification, assuming the full knowledge that eco-design is not a constraint, while obtaining a perfect balance between costs and benefits. Many efforts have been devoted to energy saving, especially by protecting the façade from the strong sunrays with the use of louvers, which are adapted to the orientation of the building.

Technology and beauty are the keywords for understanding the new Tadawul Tower in Riyadh. This is what emerges from an interesting conversation that we had with the chief architect of this project, Mr. Takamori Yamazaki. “We always try to make a combination of technology and beauty. It is like making a tunnel in the mountain. From one side comes beauty, from the other side technology. When they finally meet, we can get a successful building. We can’t achieve this result if we respect only the technology. Beauty is very valuable thing”. >



Two different cultures, Japanese and Saudi, meet in this project and find a common harmony. The first, native to a wet country and believing in thousand of gods related to the natural elements. The second, living in a parched land and believing in one god. Japanese have a good reputation for their technology and the overall quality of design. Behind these skills, there is often an effective teamwork approach. Architects, Planners and Engineers combine their knowledge to find the best cutting edge engineering solutions. Together with technologically advanced functions, Tadawul Tower is also asserting the identity of Riyadh as a leading place for the entire Middle East economy.

In December 2013, Tadawul Tower has received the prestigious “International Property Award 2013”, a world-renowned prize awarded every year to the best Residential and Commercial Project Professionals from Properties around the globe. Mr. Raad A. Al-Askar - CEO of Tadawul Real Estate Company LLC. (TREC), a real estate development company founded initially to focus on the development of the Tadawul Tower - defined this building as “iconic, sexy and functional”. The Tadawul Tower is now under construction and will be completed in 2015.

Matteo Belfiore