



# Ski Egypt

## Energy & Facilities Management, Egypt

### | The challenge

Majid Al Futtain has been at the forefront of family entertainment destinations since 1995, creating “great moments for everyone, everyday”. The Group was looking for a proactive and innovative partner to deliver Energy and Facilities Management services at Ski Egypt, Africa’s first indoor ski resort, and the second of its kind after Ski Dubai.

Enova was awarded this new opportunity in 2015, building on years of successful operations at Ski Dubai, the first indoor ski resort in the Middle East. Our expertise ensures visitors enjoy an unforgettable experience in the snow.

### | Enova’s solution

Enova has brought its 'can do' mindset to Ski Egypt right from its opening, providing the full range of technical services required to operate the site.

Enova maintains the indoor temperature between  $-4^{\circ}\text{C}$ , during the snowmaking process, and  $-1^{\circ}\text{C}$  throughout the year, to maintain the 7,000 tons of snow spread across the Snow Park.

Our services also cover the maintenance of lighting and air conditioning, snow grooming, the refrigeration of the penguins’ enclosures and pool, the system maintenance of all mountain equipment and rides, including the draglifts, 5 mountain travellers, the Zorb ball conveyor, Snow Rocket, and Mountain Thriller.

Enova also operates and maintains the chiller system, which primarily uses ammonia - a natural refrigerant with high energy efficiency and no global warming potential - and the insulation panels of the snow environment (the box). Insulation efficiency is regularly measured by a thermal camera to avoid thermal bridging and heat loss.



Cairo, Egypt



#### Contract

Date: 2015

Type: hard FM

Sector: L&E

**13,200 sqm** cold side area  
**5,500 sqm** ski school & slope area  
**5,500 sqm** snow park

**$-4^{\circ}\text{C}$  to  $-1^{\circ}\text{C}$**   
 temperature

**3 tons**  
 of fresh snow in 6h, 2 days a week

**16 snow guns**  
 (6.75 m<sup>3</sup>/h water consumption)

**1.1 MW**  
 Ammonia Cooling Plant

Enova implemented its Smart Glasses solution at Ski Egypt, training our teams on site to use this tool to share experience with our experts at Ski Dubai, located in the United Arab Emirates.

## | Benefits

Ski Egypt benefits from Enova's global expertise since the maintenance of all critical systems such as Ammonia Planet, mountain equipment, electrical equipment are provided by our in-house team. Our experienced technicians are ready to respond as quickly as possible to ensure the smooth operation of the ski and leisure equipment, and thus guarantee the best experience possible to visiting guests.

In 2019, Enova optimized the Ammonia chiller system reducing the setpoint for two chillers from  $-16^{\circ}\text{C}$  to  $-13^{\circ}\text{C}$ , resulting in a 20% decrease in electricity and water consumption for these chillers. Enova also changed all the rental area lighting system to LED lights, to further reduce system electricity consumption.

In order to bring the best of our know-how to Ski Egypt, Enova introduced its latest remote collaboration tool, the smart glasses. They allow technicians on site to gain knowledge from experts working on similar projects in other countries. With their voice control, noise capture technology and compatibility with Personal Protective Equipment, smart glasses allow technicians to work hands free while listening to live guidance from subject matter experts. Enova has completed the training sessions at Ski Egypt, in collaboration with Ski Dubai teams, to share experience on the maintenance of the grooming machine, mountain equipment and refrigerant system.

By acting as a true partner, Enova supports Majid Al Futtaim in delivering low carbon footprint infrastructures and its commitment to become Net Positive by 2040. This project has confirmed Enova as the leading service provider in the region's promising indoor ski development.



**20 minutes  
response time**



**2,000 assets  
registered in CAFM**



**350,000 yearly  
footfall**