#### IIHF SUSTAINABILITY AWARD - 2019 WINNER PROJECT:

# SAVE WATER

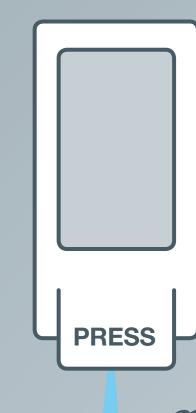
LIKE THE SOUTH AFRICAN ICE HOCKEY ASSOCIATION

Water is a precious good in South Africa and the Western Cape, where the ice hockey arena is located, experiences serious droughts. The South African Ice Hockey Association has embarked on a program to assist and conserve this scarce commodity by implementing water saving measures, which they urge all participants of their local and international

events to uphold.

In May 2019 the International Ice Hockey
Federation awarded the first ever
"IIHF Sustainability Award" to the South
African Ice Hockey Association for
their project to save water during the 2019 IIHF
Ice Hockey Women's World Championship
Division II Group B Qualification.





Waterless hand sanitizer in all public rest room facilities.



#### **ENERGY REDUCTION OF**

1 25 million kilowatts

## REFILL (USED) WATER BOTTLES

All athletes and visitors of the events are requested to be aware of water saving measures. The Federation produced posters to explain the threat of drought and to educate on how to save water by using water dispensers to refill water bottles.

Announcements inside the arena were reminding the fans of the topic and motivating them to save water not only in the ice rink but also at home.

# HAND SANITIZERS IN PUBLIC RESTROOMS

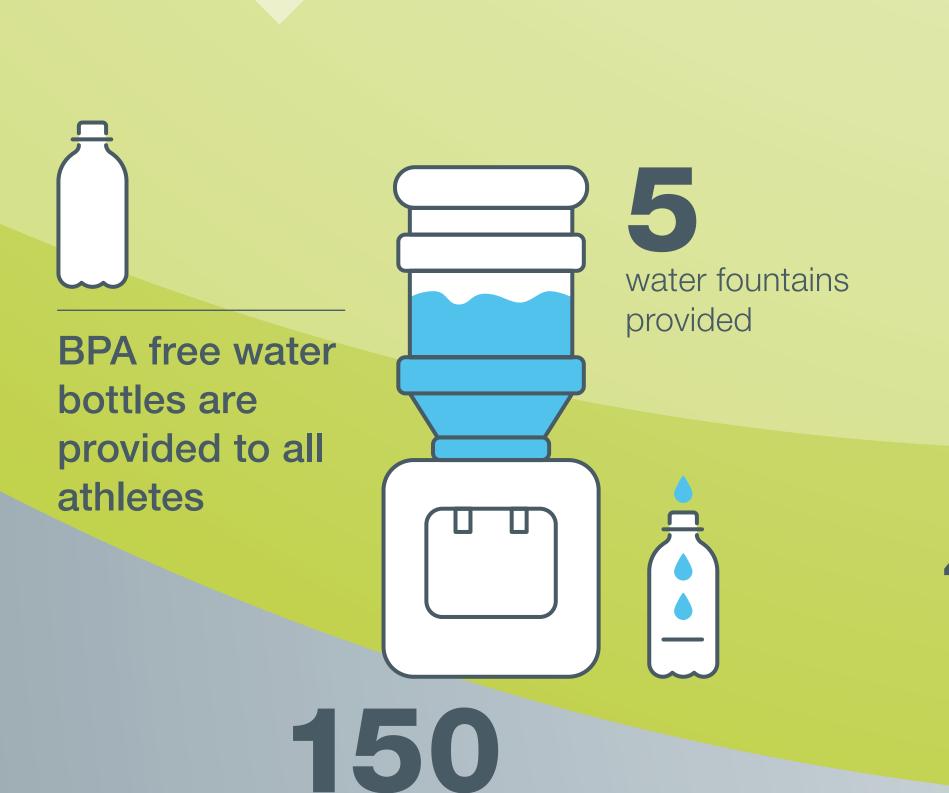
The South African Ice Hockey
Association also provided hand
sanitizers in all public restrooms to
offer a waterless alternative to clean
hands. Appointed water marshalls
were checking on leaking taps,
showers and toilets and reported
them directly to the maintenance
team.

#### ZAMBONI – ICE RECYCLING SYSTEM

The South African Ice Hockey Association installed a building management system (BMI) at the arena to monitor operations. The ice collected by the Zamboni is stored, recycled and reused to save water throughout operation times. The snow pit of the arena has been reworked to dump ice through a chute in the wall into an outdoor holding reservoir. This way the ambient temperatures can melt the snow rather than using hot water like the usual practice in ice rinks. The melted water is stored in 4 tanks with a total capacity of 15 000 liter and is reused to maintain the ice. Excess is used to irrigate the vegetation around the facilities.

### DEHUMIDIFICATION AND AIR CONDITIONING

The chillers, pumps and valves in the South African arena have been insulated in order to reduce parasitic heat gain into the refrigeration system. This enhanced system efficiency resulted in the ice surface being hard without the addition of any compressor horsepower. The heat reclaim from the refrigeration plants drive the electric resistance heaters with desiccant assisted dehumidification – the result is a dry arena, warm bleachers and an annual energy reduction of over 1.25 million kilowatts. Innovative air conditioning units were installed complying with the standards of the Montreal Protocol on substances that deplete the Ozone layer. The system continuously regulates the temperature and lowers the energy usage.



161 water bottles used

