



**AQUATOPIA** 

### **PROJECT**

**Structure:** Public Private Cooperation: **D**esign **B**uild **M**aintain (DBM)

- Financed by Stad Aalst
- Operated by Stad Aalst

Contract with: Vita Groep:

- -Cordeel NV: archtitectural
- -Hellebrekers Technieken: Water and Leisure Techniques
- -Slangen en Koenis archtitects

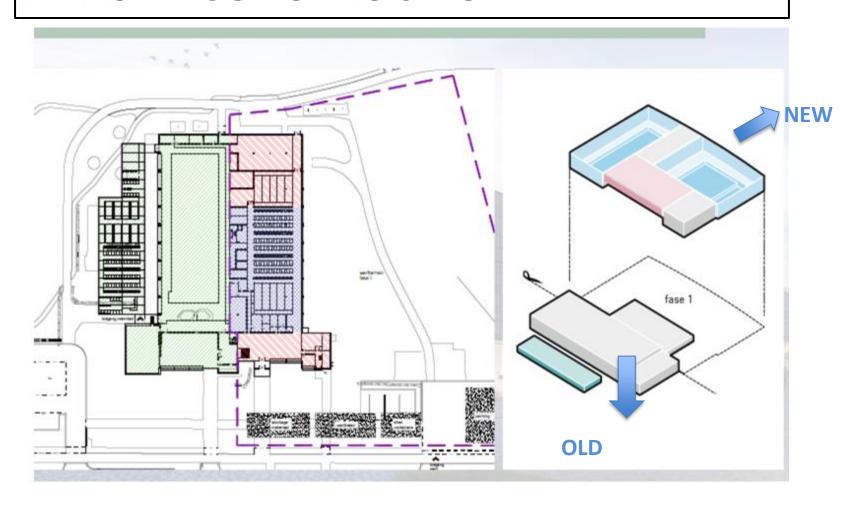
Project was split in 2 phases:

<u>Fase 1</u>: Realisation of new building with sport swimming pools and Restaurant (during this phase the old swimming pool was open for public): Opening October 2021

<u>Fase 2</u>: Renovation: The old tub serves as basis for the techniques of the new instruction pool and tubes: Opening December 2022



## **PHASED CONSTRUCTION**

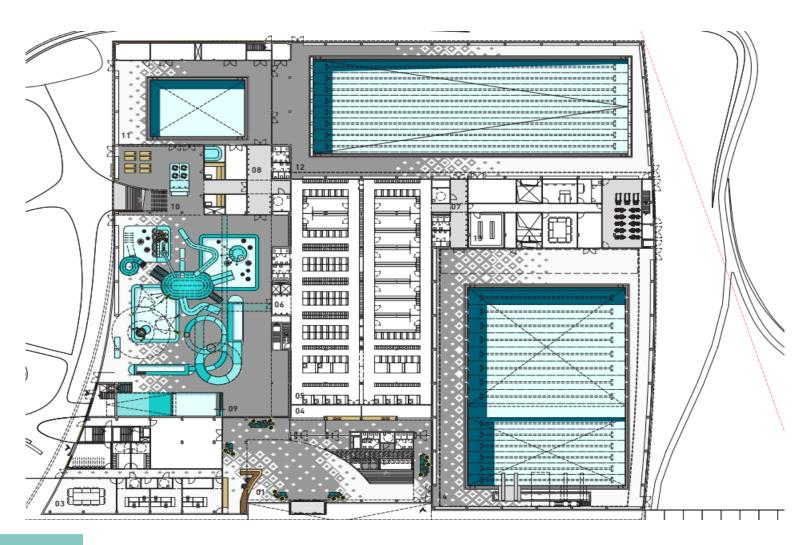


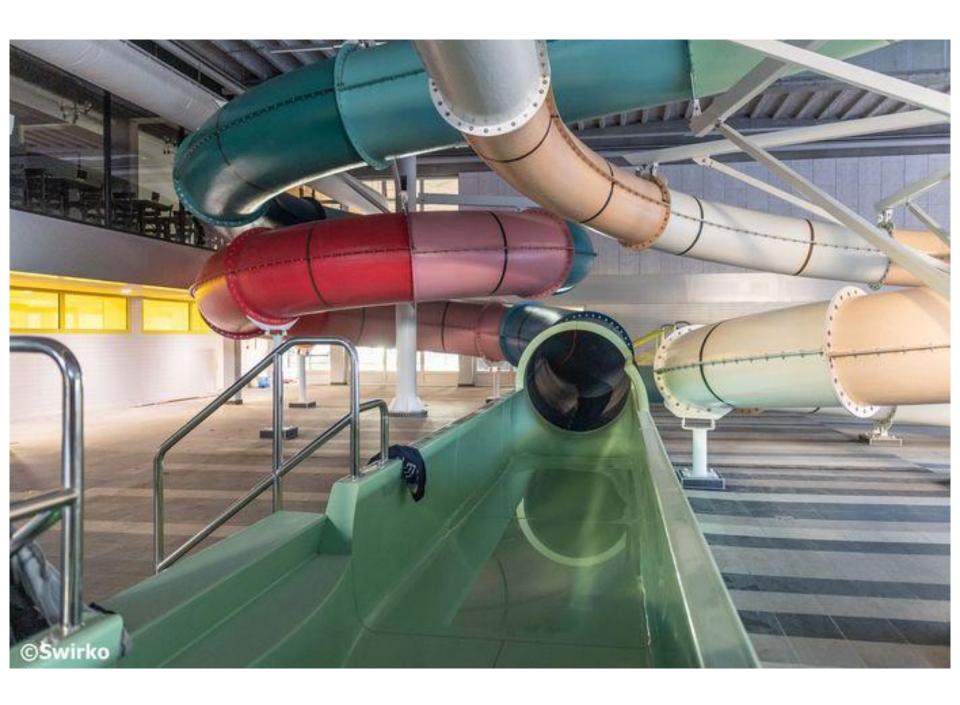
### **SCOPE**

- Official 50\*16 m pool (Temp: 27 °C)
- 25\*35m pool with 2 movable floors (Temp: 28 °C)
- 16\*9 m pool = Instrution pool (Temp : 32 °C)
- Diving Installation: 1M/3M/5M
- Swimming Analysis Techniques
- Fun:
  - Family tube (11m)
  - Tube 1
  - o Tube 2
  - 2 small tubes for children
  - o 2 child pools
- 1 polyvalent room for all types of sport
- 2 meeting rooms and 2 pop up office
- Restaurant



# **AQUATOPIA: PLAN**







### THIRD PARTIES

#### **Contractors:**

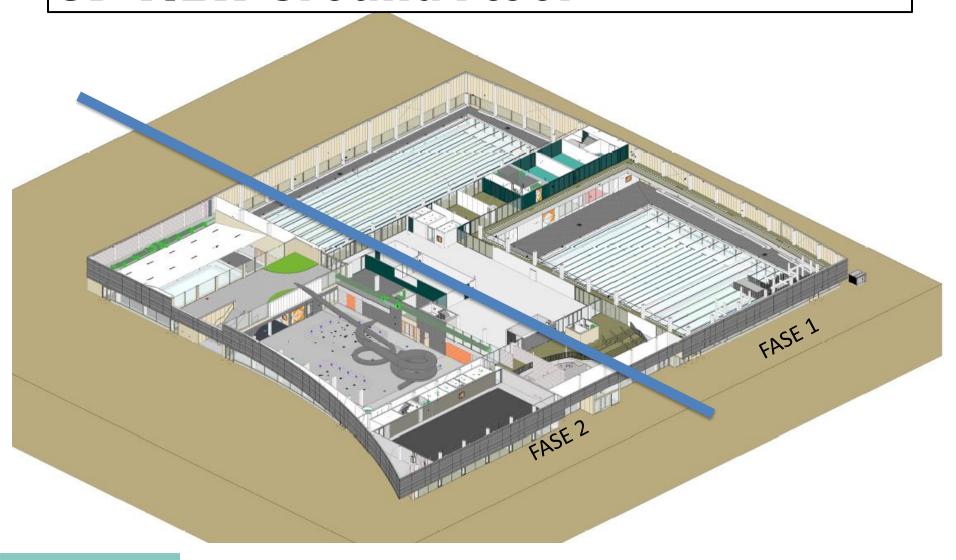
- Concession for horeca : contract for 9 years : 2.500 euro/month
- Concession for Aqualessons : contract for 9 years : 10.000 euro/year
- Available concession for swim analysis techniques: 10.000 euro/year

#### **Main Third Parties**

- Clubs
- Schools
- Public



# **3D VIEW Ground Floor**





### **DBM PROJECT IN EURO**

Cost Structure: 25.313.968 euro

Budget (**DB**): 24.959.650 euro

-Construction:

-Techniques:

Real const including additional cost during the project: 25 313 968 euro

#### Subsidies Flanders: 1.637.861 euro

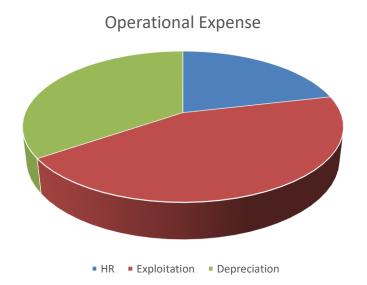
- 652.830 euro: First call in 2015 for support by Flamisch Government for swimming pools
- 778.652 euro: Second call in 2017 for support by Flamish Government for swimming pools
- 206.379 euro in the context of the 2017 call within the decree for supra-local support on sport infrastructure

Maintenance contract for 30 year: 28 422 582 euro



## **EXPLOITATION: INCOME VERSUS COST**

#### **Exploitation cost (2022):**

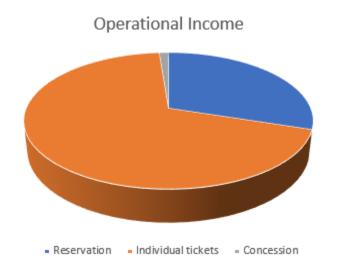


### Aquatopia

HR	€	717.459,00	21,37%
Exploitation	€	1.480.185,00	44,09%
Depreciation	€	1.159.209,36	34,53%
Total:	€	3.356.853,36	

### **EXPLOITATION: INCOME VERSUS COST**

#### Operational income (2022):



Aquatopia		
Reservation	€ 307.146,40	29,96%
Individual tickets	€ 705.529,63	68,81%
Concession	€12.656,25	1,23%
Total	€1.025.332,28	

- Reservation of lanes by clubs /schools
- Individual entrance for sport swimming of Fun swimming
- Difference between Exploitation Cost and operational income is compensated by Pricing Subsidies (budgetted by Stad Aalst)



## **PERSONNEL: DETAIL**

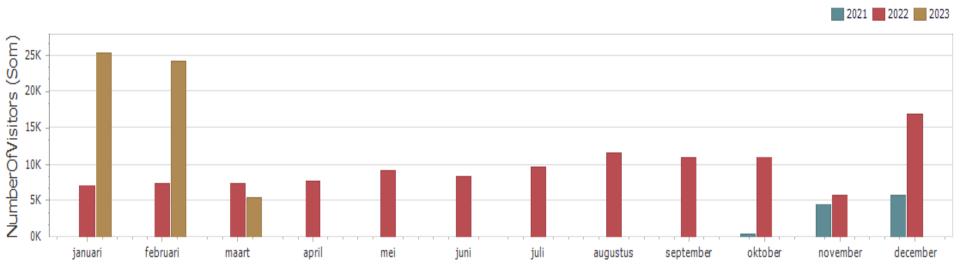
#### Overview FTE:

- 1 coordinator
- 1 receptionist
- 17 VTE lifeguards
- ( complementary job students to comply with Vlarem )



## **EVOLUTION IN NUMBER OF VISITORS**

Grafiek per jaar / maan (dag)





## SUSTAINABILITY TECHNIQUES

### Heat pump

o Limited use of central heating boilers (water is heated to 50 degrees, the rest is supplemented by central heating boilers)

### PV panels

Phase 1: 324 Pv panels x 200Wp

Phase 2 : 644 Pv panels x 375 Wp

In total good for a produced energy/year of 222.8 MWh/year ( 222 800 kWh/year)

The estimated consumption including phase 2 is 251.5 MWh/year

→The total energy produced does not cover all consumption.

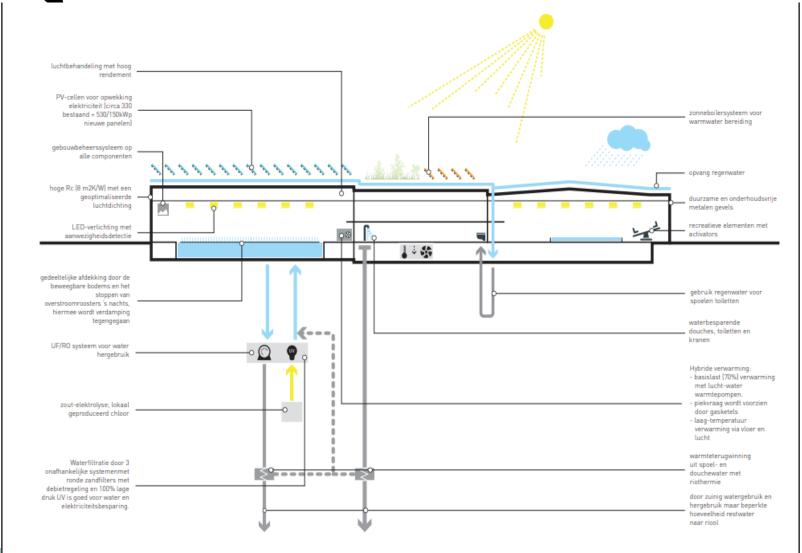


## **SUSTAINABILITY TECHNIQUES**

- Reuse of rainwater after filtering by UFRO
  - o 19 rainwater tanks = 380,000 liters of rainwater
  - o Filter to swimming water via Ultrafiltration and Reverse Osmosis
  - o Used to supply the swimming pools on a daily basis
- **Recover the suppletion water**: 75% is recovered by the rinsing filters
  - → water savings
- **Riothermie**: The heat from the suppletion water and the shower is recovered and used to heat up the rainwater (circular process)
  - → heat savings
- **The residual product of the heat pump** (cold) is used to cool the meeting rooms and administrative areas
- LED-lighting and Insulating glazing higher than the legal standard



# **AQUATOPIA: SUSTAINABILITY**





Questions?

Thanks for listening!

