SMART WATER MANAGEMENT SOLUTIONS IN PREMIUM SHOPPING CENTRES

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Our Group

We own, develop and operate shopping centres and airport retail operations across Europe and the United States.

We generate value through operational excellence and our ideal position as a unique platform for local and international retailers and brand ventures.

We build, operate and maintain state-of-the-art office buildings and convention & exhibition centres in the Paris region.

- 92 shopping centres
- 55 flagships
- 2 continents
- 12 countries
- 6 airport retail operations
- 1.2bn annual visits
- State-of-the-art office buildings
- Major convention & exhibition centres in the Paris region
Our presence

Located in the most desirable catchment areas in Europe and the United States

- Currently
- Coming soon
Our Czech and Slovak portfolio

**Metropole Zličín**
- Lettable area: 49,000 sqm
- Annual number of visitors: 8.4 million
- Number of stores: 125

**Centrum Černý Most**
- Lettable area: 83,000 sqm
- Annual number of visitors: 12.3 million
- Number of stores: 178

**Centrum Chodov // Westfield Chodov**
- Lettable area: 95,000 sqm
- Annual number of visitors: 18.7 million
- Number of stores: 301

**Aupark Bratislava**
- Lettable area: 49,000 sqm
- Annual number of visitors: 11.8 million
- Number of stores: 220
Our CSR strategy

We implement an ambitious corporate social responsibility strategy to address the main challenges facing commercial real estate.

**BETTER SPACES**
Moving towards a low-carbon economy and sustainable mobility

**BETTER COMMUNITIES**
Fully integrating business activities within local communities

**BETTER TOGETHER**
Empowering teams on sustainability and diversity

- **-50%** carbon emissions across our value chain by 2030
- **100%** of owned & managed assets with a community resilience action plan by 2020
- **100%** Group employees with yearly individual CSR objectives by 2020
WATER MANAGEMENT SOLUTIONS IN URW
BREEAM CERTIFICATION

BREEAM in use: High international standard assessment and certification scheme designed to help building managers reduce and improve the environmental performance of existing buildings.

<table>
<thead>
<tr>
<th>Shopping centre</th>
<th>Building management (part 2) score</th>
<th>Next certification year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrum Chodov</td>
<td>Outstanding</td>
<td>2021</td>
</tr>
<tr>
<td>Centrum Cerny Most</td>
<td>Excellent</td>
<td>2020</td>
</tr>
<tr>
<td>Aupark</td>
<td>Excellent</td>
<td>2020</td>
</tr>
<tr>
<td>Metropole Zlicin</td>
<td>NA</td>
<td>After extension</td>
</tr>
</tbody>
</table>
Centrum Chodov performed an “Outstanding” score in its last BREEAM in USE certification in both evaluations « Asset » (technical aspects of the building) and « Building management » (Property management).

Both evaluations include a large chapter of test and proofing focused on water management.
Example of items declared and proved by tests for BREEAM in USE:

- All water taps are preadjusted to max consumption 10s/0.9l (PIR controlled, video test managed)
- All urinals are adjusted to max consumption 1.2l per flush
- All cabin toilets are pre adjusted to max consumption 4.5l per big flush/3l small flush
- Low-water shower heads (max 6l/min)
- Professional dishwasher for the foodcourt (max consumption 7l/per rack of dishes)
- Automatic leak detection system across the pipe system at numerous strategic points.

Automatic leak detection system functioning: Management team adjusted max consumptions at certain times (for e.g. over the nights) and if there is some overconsumption, system sends an alarm message and the water supply is automatically closed.
CENTRUM CHODOV - water management

- Centrum Chodov is saving water by using drainage water. The source of this drainage water is large enough to fulfill needs for the all toilet flush system of Chodov (saving approx. 12,200 m³ annually of drinkable water).
- Future plan is to use this source for the cooling system and additionally save 13,000 m³ of drinkable water.
- Also linked to water management, we are decreasing the consumption of electricity via:
  - Using solar panels to pre-heat water for dish-washers
  - Using residual heat from cooling production to pre-heat hot sanitary water for technical facilities (since implementation in 2016, it has saved 170,000 kWh of energy).
CENTRUM CHODOV - drainage system

Drainage system

Drainage water tank

Reservoir

Drainage water treatment plant
Cerny Most is saving water from 3 different sources:

- Grey water (or used water) collected from the toilets and rest rooms
- Rain water collected from the roof. A smaller part is led through retention tanks back to a small water stream, called „Chvalka“.
- Drainage water (called „dry poldr“) in underground parkings coming from ice, snow brought by cars and rain waters.

All of the water collected via these sources is processed in a treatment unit to be cleaned and reinserted in the flushing system of the toilets.
CENTRUM CERNY MOST
Grey and rain water treatment

Fully automatic process to clean grey water:
- Grey water is collected along with rain water in two, big water tanks.
- The rain and grey water are then processed through the grey water treatment unit to be filtered, cleaned and pumped to a reservoir where it will reinserted in the toilet flushing system.
Grey and rain water treatment diagram
In addition to its main source of water from water supply and treatment company BVS, Aupark is using water from 3 wells:

- 2 used for watering greenery (saving since 2012 - 9,900m³)
- 1 used for supply of cold water to cooling towers (saving since 2012 - 17,600m³)

Aupark is not using grey water at toilets as it was not previously designed to adopt this solution in later stage.
AUPARK - water retention project

Water retention project location

- Project to collect rain water or use of rain drainage system for irrigation of greeneries
- Tax incentives implemented recently in Slovakia aiming at enhancing the use of rain water
- Estimated costs = 90k€
METROPOLE ZLICIN - water management

▶ Usage of rainwater collection in Metropole Zlicin for gardening purposes. Annually, over 21,000 liters of rainwater are collected.

▶ Currently we are looking for a solution for using water from the retention tank. Railway line along the shopping center complicates this solution.

(1) SC total annual water consumption - 44,100 m³
THANK YOU