Profi Camp Eintracht Frankfurt

The Project

All Eintracht Fussball AG employees, from the licensed players to the different departments and the board of directors, should work under one roof in the future. The architecture of the building aims to represent the sports club through its restrained classic elegance and the high quality, present in every little detail. The building project will be equipped with a sustainable and efficient energy solution, which includes a combination of solar thermal energy, heat pumps and a ground heat exchanger in conjunction with heating and cooling surface systems. This results in a CO2 saving of around 160 tons per year. The percentage of renewable energies is over 80 percent. A dream of the future that can be realized today.

For planning the technical equipment of the building, IBV from Heidelberg proposed the client this innovative system technology.

The client

Eintracht Frankfurt Fußball AG
Mörfeldener Landstr. 362
60528 Frankfurt

Building data

Plot size:	17.330 m^2
Gross floor area above ground:	15.220 m^2
Gross floor area underground:	3.580 m^2
Total gross area:	18.800 m^2
Of which, parking area:	2.395 m^2
Workplaces:	240
Parking spaces:	62 spaces in the underground car park, 101 spaces in the parking deck, 16 open spaces
Bicycle parking spaces:	50 in the underground car park

The energy data

Heating load	302 kW
Cooling load	432 kW
Annual energy requirement for heating	approx. 361.200 kWh
Annual energy demand domestic hot water	approx. 73.000 kWh
Annual energy requirement for cooling	approx. 302.400 kWh
Solar coverage	50 %
Percentage of renewable energy through BES system	83 %
Operating cost savings (compared to natural gas heating)	approx. 45%
CO_2 saving	160 tons of CO_2

August 2019

The 4,600 m2 ground heat exchanger is nearing completion.

Introducing the filling material

The ground heat exchanger is relocated on two levels in three construction phases.

The EnergyRoutingSystem is implemented in Frankfurt as follows

Collectors	40 Stk. IS-XL 2,7W
Solar-thermal collector area	100 m^2 (net)
Solar control station	SCPU DN50
Geothermal heat pumps	4 x IS-WP SW Prime 60 kW: 240 kW
Air-water heat pumps	3 x IS-WP LW 150 kW: 450 kW
Ground heat exchanger	4.600 m^2 laid in two layers
Domestic hot water production	3 x fresh water stations with 80 l/m each
Domestic hot water buffer tank	IS-HPX 3000 L
Solar buffer tank	2 x IS-HPX 2000 L
Heating buffer tank	IS-HPX 4000 L
Cooling buffer tank	IS-KSX 4000 L
Bivalent system with gas boiler	

Completion is scheduled for the end of 2020, we will keep you informed!

Are you also looking for new energy solutions with a high percentage of regenerative energy, warm letting, low energy costs and the latest control technology? ***Contact us!***