

# SUSTAINABLE POINTS

## HEATING & COOLING SYSTEMS



C35 concrete is used for BARCO headquarter building the outside of the building is covered with 8cm thick and double sided concrete.

By this implementation the building has resistance against pressured explosions and earthquakes.

By using double sided concrete in the construction the boiler room is saver. So the building is perfectly isolated on sides as well as on roof.

Through this isolation system in winter the facility is kept warm and in summer it is kept cool.



## WASTE WATER TREATMENT SYSTEM



Regular checks on wastewater treatment plant done by internal and external experts

Treated water analysis reports regularly received from the external experts

The duration of irrigation is 4-7 minutes, watering the meadows around the facility 2 times a day

During the irrigation time of 4-7 minutes 26 tons of water used, in total we save at about 52 tons of water everyday

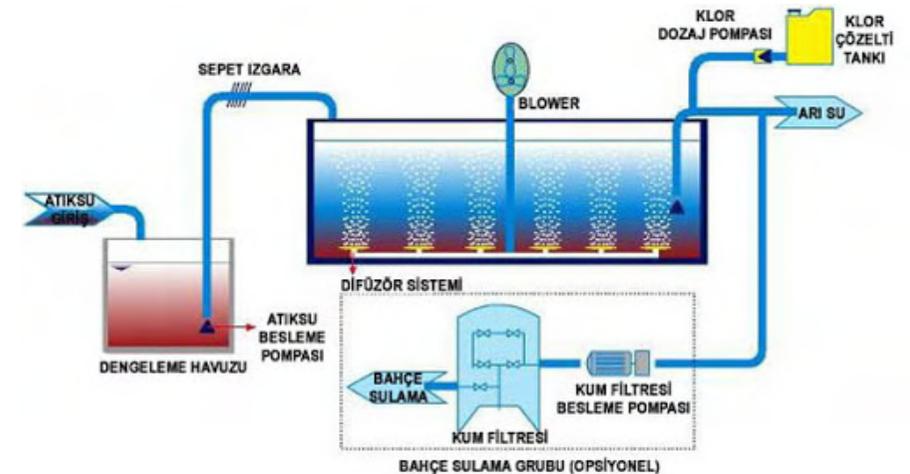
Daily capacity is about 60 Cubic meters

Monthly capacity is about 1800 Cubic meters

The treated water is used for irrigation around the facility

Facility is surrounded by the irrigation system to water the meadows all around the building.

The irrigation system works automatically (manual usage is also possible)



## WASTE WATER TREATMENT SYSTEM



YEAR	AMOUNT OF PURIFIED	UNIT		ANNUAL AMOUNT
2020	13.728	Tonnes		22.505€
2021	16.224	Tonnes		26.597 €



## SUN TRACKER SYSTEM



By this implementation BARCO has below mentioned savings;

Without sun trackers the daily electrical usage is estimated about 240-260 kwh

With sun trackers the daily electrical usage of is about 180 kwh

Daily profit is : 70 kWh

Monthly profit : 1820 kWh per months

Annual advantage : 21840 kWh per year

23 Sun Trackers; by this implementation about 30% energy is saved each year so big carbon emissions are prevented.

By using these alternative energy sources the release of carbon -footprint is reduced to 210 tons annually.





T5 economical and environmental friendly Bulbs:

In the past binary bulbs were used BUT nowadays we use T5 economical/environmental friendly bulbs at manufacturing units

In this way 20% reduction on energy consumption.

Less damaging for the environment

Less harmful for human body  
( e.g. Eyes)



## WASTE MANAGEMENT SYSTEM



Collected waste materials (paper) inside the factory are put into the intended pressing machine with a pressing capacity of 30 tons

Before having a pressing machine we recycled wastepaper, too.

But since there is a pressing machine the conditions of treating improved so much!

We realized the importance of recycling even more.

Conditions after the implementation of pressing machine changed in various aspects so e.g. Fuel for the transportation of waste materials is used fewer. Through the big capacity of 30 tons recycling huge amounts of paper in one step is possible.

Recycled Paper:  
-about 5 tons per month

Recycled chemicals:  
-about 20 kg per month

Recycled Plastic:  
-about 800 kg per month

Recycled domestic waste:  
-about 650 kg per month

Recycled Fabric:  
-about 1000 kg per month

Recycled medicals:  
-about 0,5 kg per month



## SOLAR PANNEL SYSTEM



We are in a process of arranging solar pannels in Mus factory. In this year we will start producing our own electricity.

Currently , our hourly electricity consumption is 350 kw/h

So we will get produce 100 kw/h (30 % )of our electricity need through solar pannels

Investement Type	On Roof
Total Installed Power	100,28 kwp
Unit Investment Costs	1047,07 €/kwp
Total Investment Budget	105.00 €
Total Area	662 m2
Radiation	1615 kwh / Meter
Spesific Productivity	1370,28 kwh/kwp
Total Annual Production	137.412 kwh
Annual Gross Income	15.769 €
Gross Return on Investment	3,33 Years
Total Production in 25 Years	3091587 kwh
Unit Enegy Costs	0,0170 €/kwh



## SELF-CLEANING URINALS WITHOUT USAGE OF WATER



The Mens' restrooms have self - cleaning waterless urinals

With this implementation 450 tons of water are saved

Annually about 10.993TL(1061€) has been saved by this practise





With the projection of smoke extractors inside the operation the entire factory can be cleared up from the smoke in 5 minutes

There are 6 existing smoke extractors

2 water pumps with 75 kWh power

In our firm sprinkler system and proaction systems are existing against fire explosion

There are 4 hydrants available for the fire brigade as water resources

