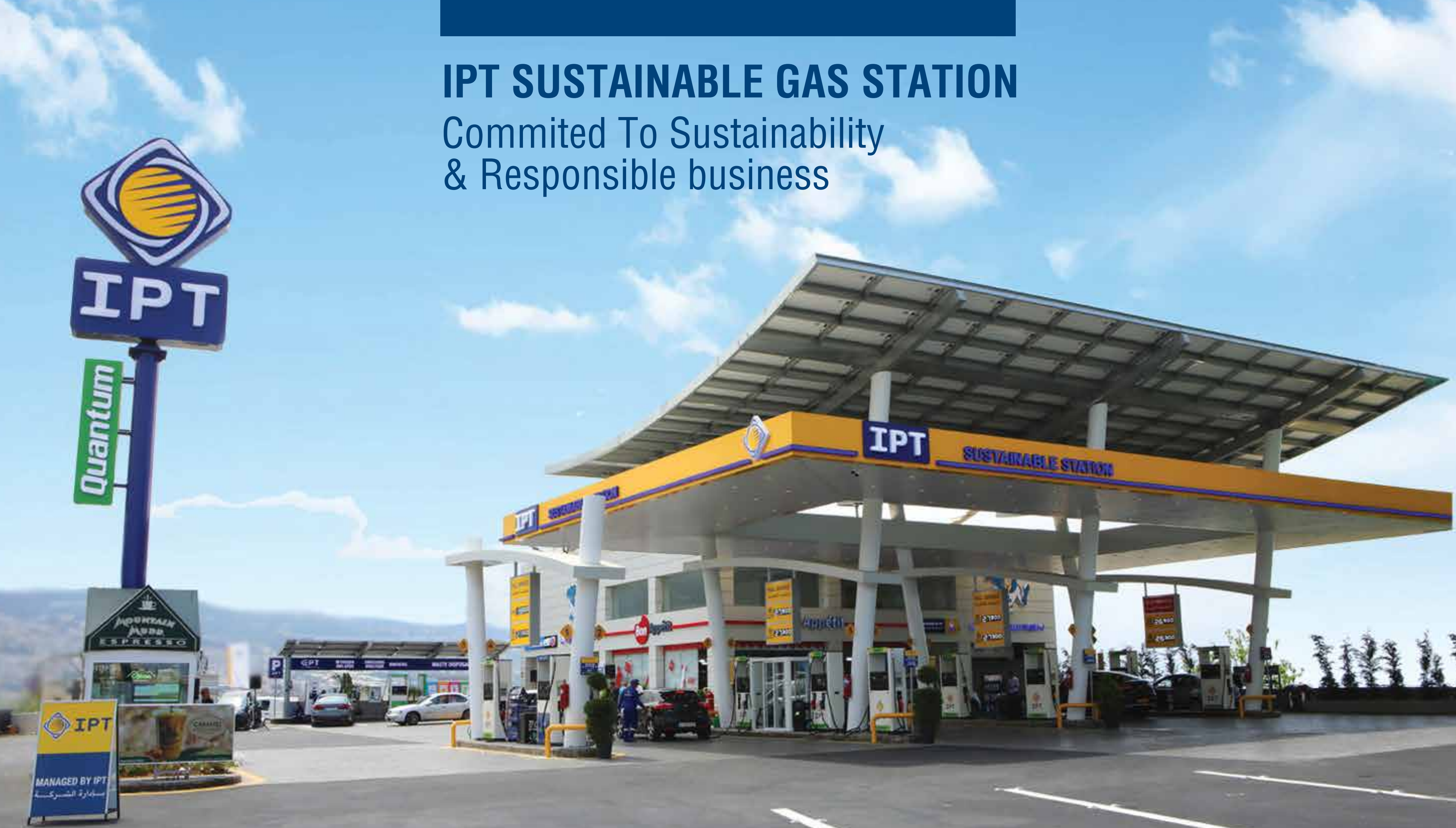


IPT SUSTAINABLE GAS STATION

Committed To Sustainability
& Responsible business



A photograph of an IPT gas station. The station features a large canopy with 'IPT' and 'SUSTAINABLE STATION' branding. A tall sign on the left displays the IPT logo and 'Quantum Espresso'. A small sign in the foreground reads 'MANAGED BY IPT' and 'سدارة الشركة'. The background shows a clear sky and some trees.

Eng. Jean-Marc Roche
Project Development Manager

IBEF 2019
IPT Group



To increase our Energy Performance and Reduce the Environmental impact of our gas stations, we developed an “Energy & Environmental Management Strategy (EEMS)” With the assistance of the International Finance Corporation (IFC) and the support of Fransabank.

This joint work resulted in a report that showed efficient ways to institutionalize sustainability in our gas stations through saving energy and water, reducing emissions, protecting the soil and ground water, and collecting waste for eventual treatment and reuse.

The start was from Amchit where we built IPT Sustainable Station, the first of its kind in Lebanon.

The station features advanced solutions and innovations in the field of energy and water conservation and pollution reduction.

The Features of IPT Sustainable Station



1- Energy efficiency & renewable energy solutions to reduce energy consumption



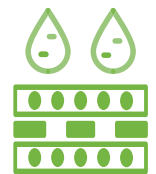
2- Water conservation solutions to reduce water consumption



3- Wastewater treatment solutions to achieve ZERO toxic discharge in sewer network



4- Cleaner & environmentally friendly products & services



5- Soil & ground water protection to achieve ZERO hydrocarbon



6- Commitment to Health, Safety and Quality standards



7- Green roof to lower energy consumption

1 - Energy efficiency & renewable energy solutions to reduce energy consumption

- ▶ **Solar power system**
- ▶ **Vapor Recovery System**
- ▶ **Smart LED Lighting**
- ▶ **Eco Friendly Air Conditioning System**
- ▶ **Energy Efficient Automatic Car Wash**





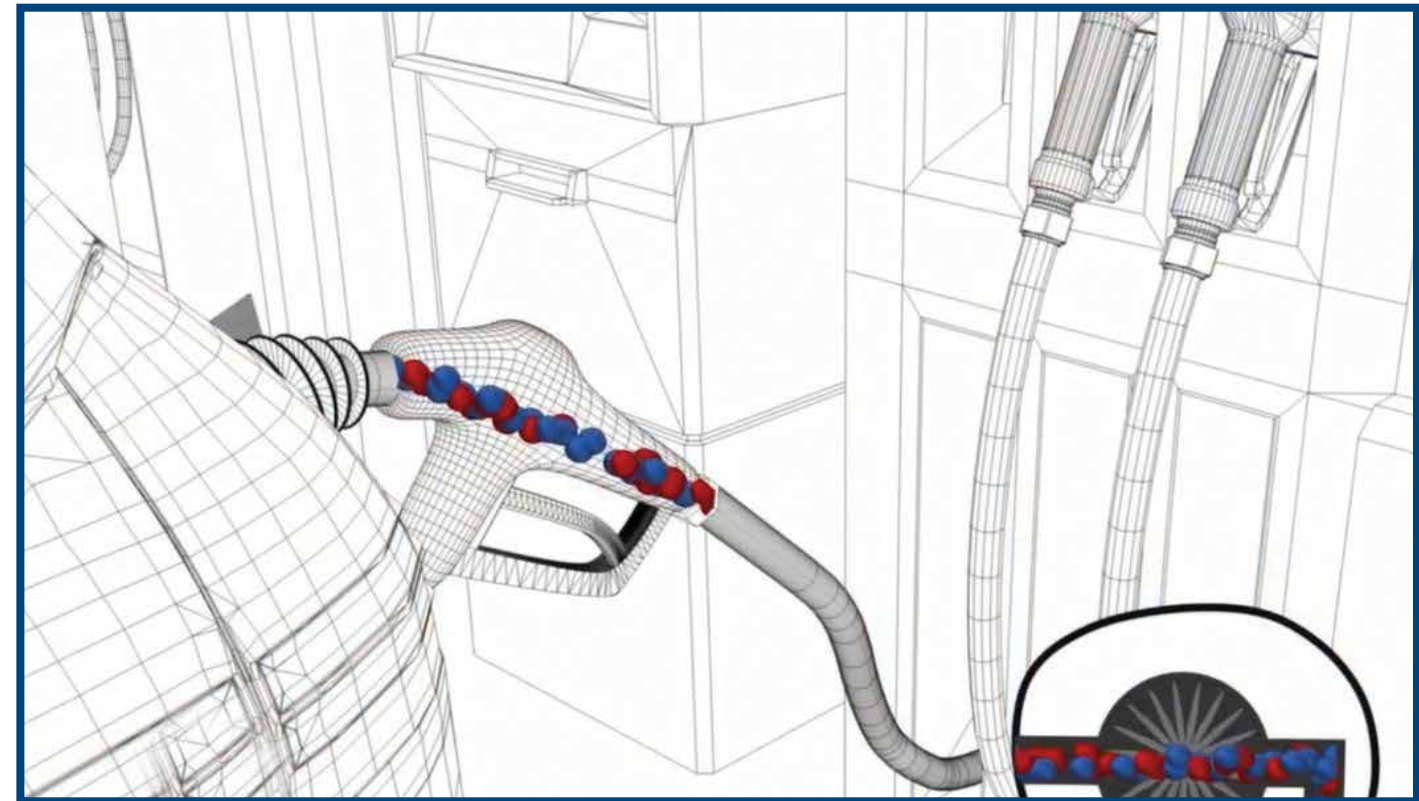
Solar power system

- 200 Pannels
- 340 watt/pannel
- Total Production of 68kw



Vapor Recovery System

- Fuel Vapor gets collected back to the tank.
- Safer and eco-friendly experience.



2- Water conservation solutions to reduce water consumption

▶ Rainwater Collection

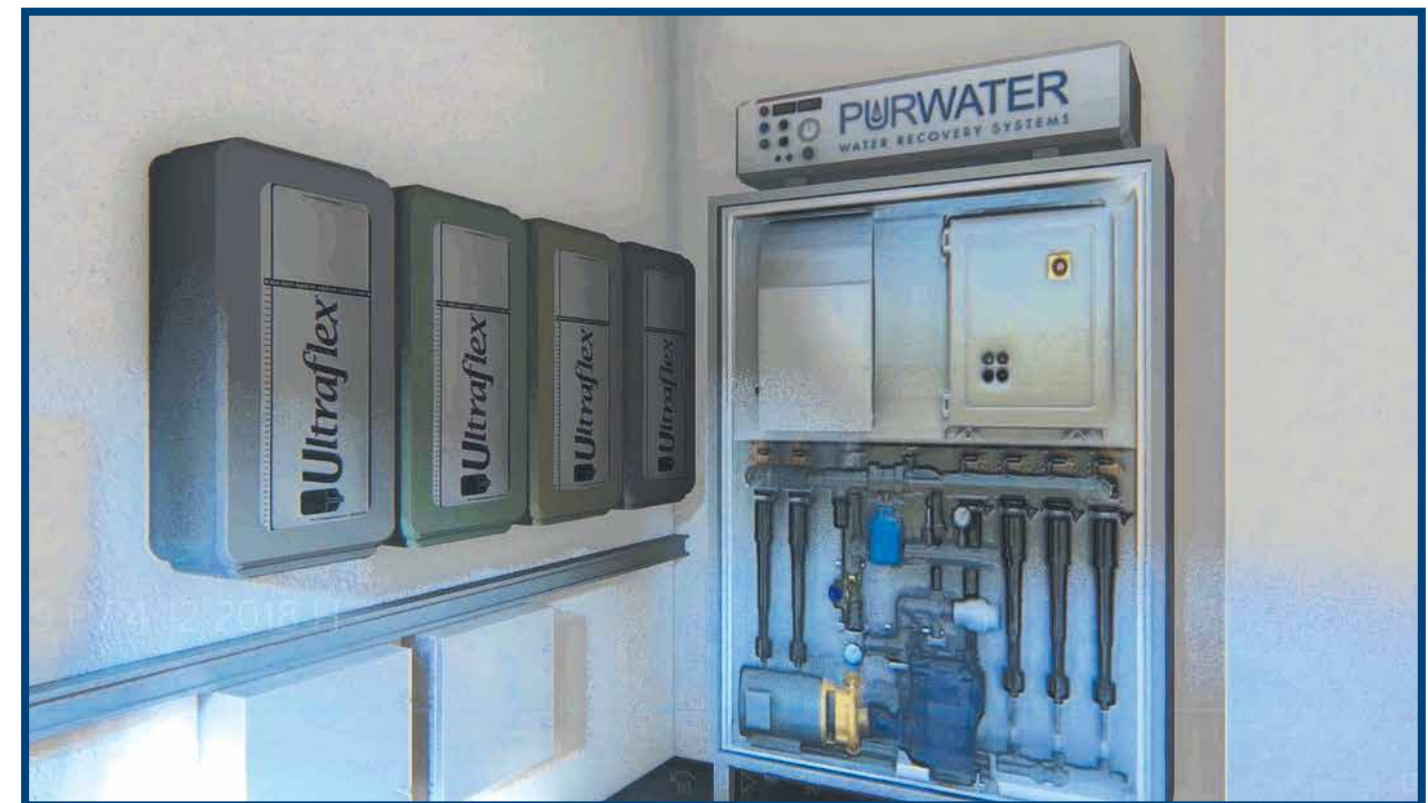
- Rainwater collected from canopy and roof back to an underwater tank.
- Water Treatment to supply station with fresh and R.O water.



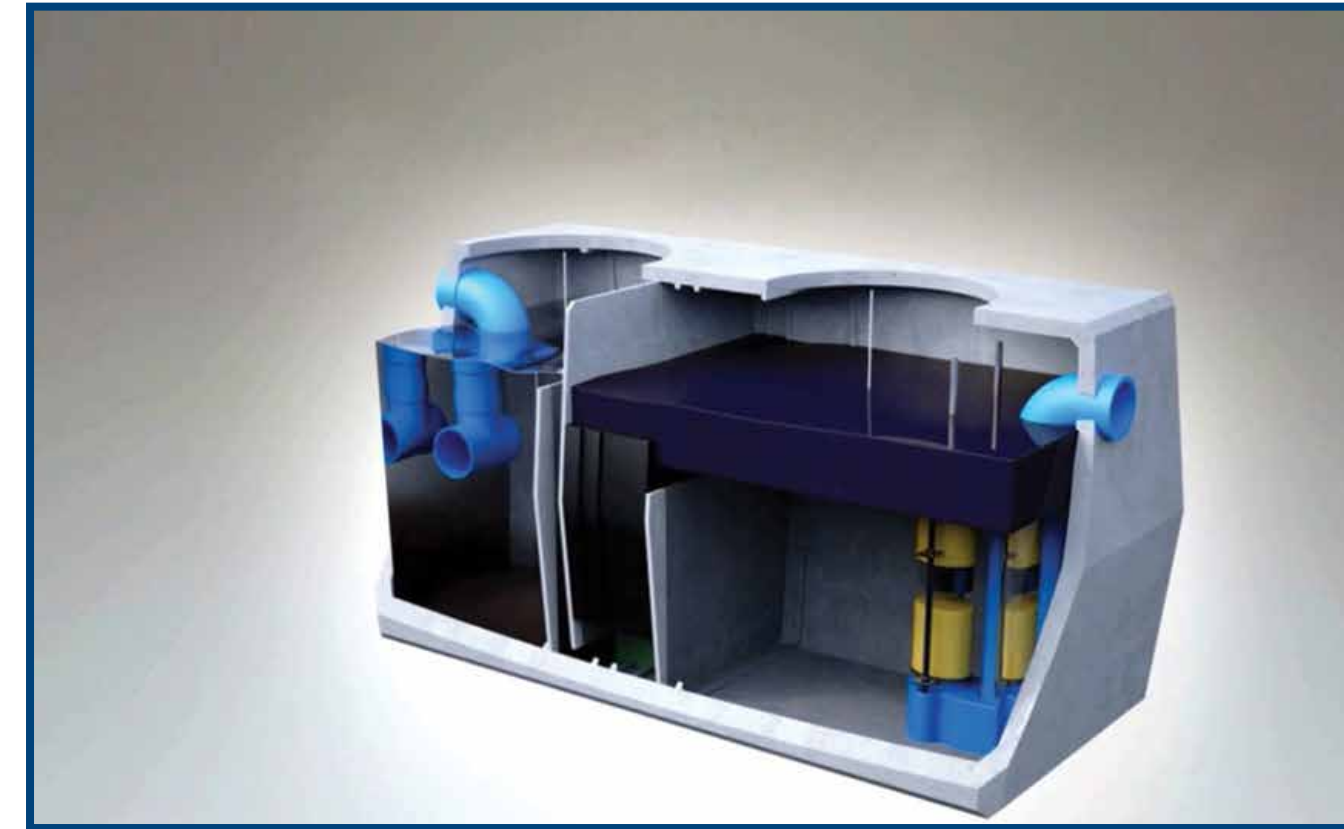


 **Water Reclaim System for Carwash**

- **Water used in carwash is recovered & filtered back.**
- **60 to 85% of the used water is reclaimed back & reused in car wash.**
- **No Chemical treatment needed.**



3- Wastewater treatment solutions to achieve ZERO toxic discharge in sewer network



- Waste water goes through an oil/water separator before getting released into the sewage system.
- Oils and hydrocarbons are emptied and treated when it reaches the ideal level.

4- Cleaner & Enviromentally Friendly Products & Services

- ▶ **Quantum, the clean fuel from IPT**
- ▶ **Biodiesel produced from Waste Cooking Oil**
- ▶ **Solar Powered Electric Vehicle Charger**
- ▶ **Nitrogen tires inflator**
- ▶ **Emissions Analyser**
- ▶ **Waste Disposal Unit**





Quantum, the clean fuel from IPT

- Advanced gasoline formula that improves driving experience.
- Better fuel economy
- Less pollution



▶ Biodiesel produced from Waste cooking Oil

- Cleaner, safer and biodegradable.
- Can be blended with petro diesel at several concentrations.
- Less greenhouse gas emissions (around 15%) compared to petro diesel .



▶ Solar Powered Electric Vehicle Charger

- Solar powered charger making it a full sustainable solution for reduction of greenhouse gas emissions.
- Fast charging DC station (50KW).
- Full charge time between 15 and 30 minutes.





Nitrogen Tires Inflator

- Nitrogen has a bigger atomic structure making it less able to escape from the tyre
- Reduction of tear and wear on the wheels.
- Better Fuel economy.





Emissions Analyser

- 4 gas analyser measuring (O₂, CO, CO₂ and HC)
- Diagnose problems in vehicles.



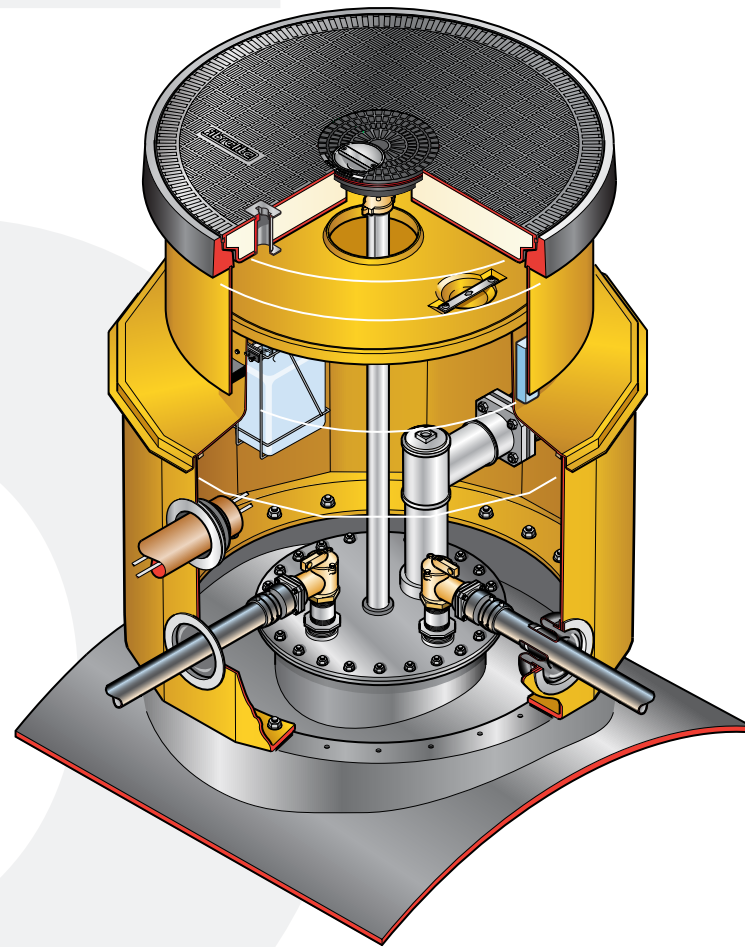


Waste Disposal Unit Area

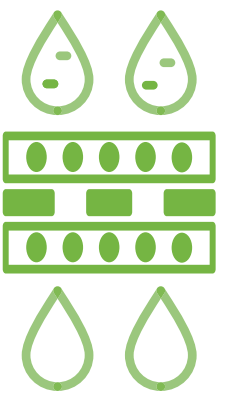
Different types of waste can be safely deposited in separate bins available on the station for special treatment and reuse. These bins are designed to collect Waste Cooking Oil, batteries, electronics, glass, organic waste, plastic and paper.



5- Soil & ground water protection to achieve ZERO hydrocarbon



- Double wall tanks with leak detectors.
- Tanks are equipped with fiberglass sumps completely sealed on the manholes.
- PE pipes between the tanks and the fuel dispensers.
- Remote filling sumps with a spill tray.



6- Commitment to Health, Safety and Quality standards

- ▶ Automated External Defibrillator (AED)**
- ▶ Safety at the Station**
- ▶ Central Monitoring & Control System**
- ▶ Automatic Vehicle Recognition System**





Automated External Defibrillator





Safety At The Station



**EMERGENCY
BUTTON**





Central Monitoring & Control System



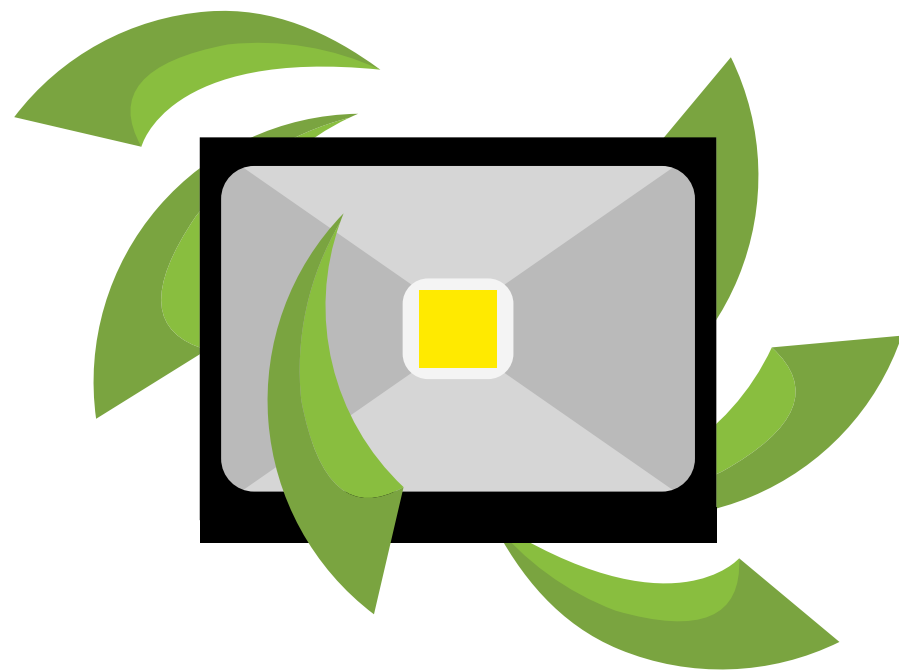


Automatic Vehicle Recognition System



7- Green roof to lower energy consumption





▶ Smart LED Lighting

- **Up to 80% energy saving.**



▶ Eco Friendly Air Conditioning System

The station's air conditioning system uses R32 refrigerant which is ozone friendly and runs on inverter type compressors to significantly reduce energy cost and contribute to better fuel economy. DC inverter type compressors

