



green DRIVE

HIGH EFFICIENCY PUMP SYSTEMS

Improving the efficiency of a pump requires a significant reduction in operating costs, which represent up to 95% of total costs depending on the size of the motor within the machine's useful life.

For this reason, a careful cost-benefit analysis is necessary when choosing a new pumping system. Through the use of inverters and control systems, new technology renders it possible to attain efficiency levels that drastically reduce the operating costs of these machines, in compliance with the provisions of EU regulation 640/2009, which stipulates minimum yield values for new generation electric motors.

Pump Systems with Guaranteed Savings EPC formula.



GREEN DRIVE INTERVENTIONS

Whitenergy's Green Drive service gives the client the opportunity to renew a pump fleet without incurring investment costs in the purchase of new machinery.

In fact, through the formula of the EPC (Energy Performance Contract) formula, Whitenergy invests directly in the purchase of pumping systems and offers the customer guaranteed minimum savings.

Green Drive is designed for companies that wish to:

- promote energy efficiency measures and modernize their plants without the burden of direct investment;
- be entirely devoted to their core business, without the concern of managing and maintaining pumping systems.

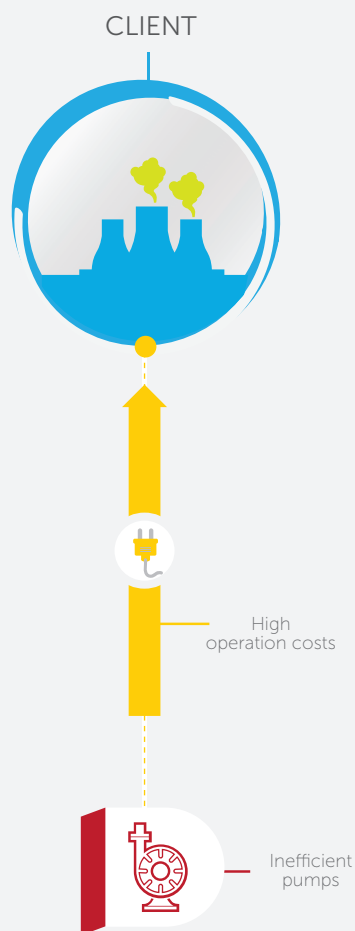


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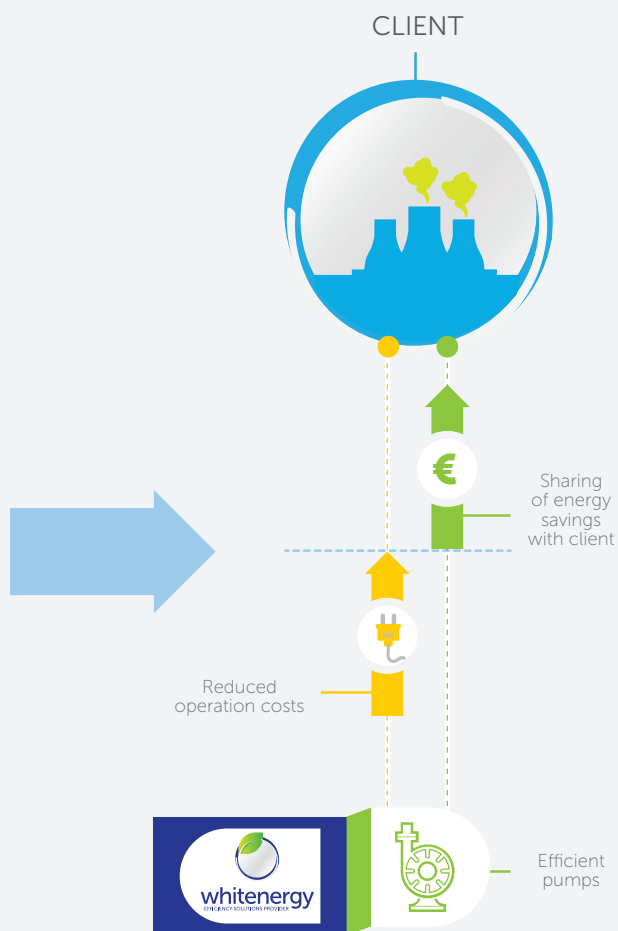
WHO IS IT FOR?

Green Drive is essentially designed for companies in the industrial and services sectors, such as water utilities and district heating.

Situation prior to intervention



Situation post intervention



THE WHITENERGY GUARANTEE

- Detailed audit on pumps, with on-site measurements of operating parameters
- Definition of the specifications for new pumps

CASE STUDY

GREEN DRIVE intervention in the industrial sector

Chemical plant in northern Italy, operating in the production of "chemicals" used in the aluminium industry. The pump fleet is obsolete and inefficient, given that it operates in a continuous cycle throughout the year.

Situation prior to intervention

There were 6 pumps operating at set points with throttling and recirculation valves. The annual energy expenditure for pump operation was € 130,000 per year.

The proposed intervention and post-intervention situation

Following a detailed audit on each machine, Whitenergy took detailed on-site measurements of prevalence, flow rate and electrical consumption. The ideal solution was then identified, consisting of the replacement of existing pumps with new pumps, with reduced power compared to the previous ones. The pumps are equipped with an IE3 electric motor and an inverter.

The results of the operation are:

- savings on electricity to power the new pumps
- improved system management, through an automatic audit and performance monitoring system.

The investment was made in full by Whitenergy. The customer benefits from total shared savings of € 60,000 per year and is no longer required to maintain the pumps.



GREEN DRIVE intervention in the services sector

Telecommunications and Internet company in central Italy, equipped with a data processing centre and a large server farm, with a high demand for cooling energy. The cold-water distribution system is implemented through poorly efficient pumping systems which fall below current standards. The system works in a continuous cycle throughout the year.

Situation before intervention

There were 8 pumps working at set points with throttling and recirculation valves. The energy expenditure for pump operation is € 150,000 per year.

The proposed intervention and post-intervention situation

Whitenergy carried out a detailed analysis on each machine, through on-site collection of prevalence, flow rate and electricity consumption data. The solution identified comprises replacing the existing pumps with new pumps, with reduced power compared to the previous ones. The new pumps are equipped with an IE4 electric motor and inverter.

The results of the intervention are:


- savings on electricity for the new pumps, corresponding to € 90,000 per year
- improved system management, through an automatic audit and performance monitoring system.

The investment was made in full by Whitenergy. The customer benefits from shared annual savings and is no longer required to maintain the pumps, as this service is carried out by Whitenergy.

- Installation and testing
- Maintenance and reports on savings generated by the project



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