REPLACEMENT OF

ELECTRIC MOTORS

WHAT IS THE REPLACEMENT OF ELECTRIC MOTORS?

stream SAVE

Little by little, old, low efficiency electric motors are being replaced with high efficiency electric motors before their end-of-life. Electric motors are big consumers of electricity as they are used to convert electrical power in many different contexts. The replacement rate of old inefficient motors is slow, and their anticipated renovation driven by policy incentives is desirable.

WHAT ARE THE BENEFITS OF THE ENERGY SAVINGS ACHIEVED?

Because electric motors consume so much electricity, small improvements in efficiency result in significant absolute savings. Other benefits include greater financial savings, reliability, flexibility, productivity and quality control as well as reduced maintenance, down-time, production time and loss.

WHAT ARE THE ENERGY SAVINGS OPPORTUNITIES?

Potential savings can be even greater if motor replacement is accompanied by measures that improve the efficiency of the entire motor system, such as the correct sizing of the motor, digitisation, sensorisation, removing unneeded transmissions, equipping the motor with variable speed drive, etc.

WHAT MAKES CALCULATING ENERGY SAVINGS CHALLENGING?

There are gaps in the availabile data, such as the age of existing motors and their efficiency, which makes it difficult to obtain an accurate estimation of the energy savings and calculate additionality. Data on other parameters needed for the calculation, such as average number of operating hours and load factor, are also outdated.

WHAT IS NEEDED TO IMPROVE ENERGY SAVINGS CALCULATIONS?

Up-to-date, reliable data on the existing EU stock of motors is needed to improve the energy savings calculations.

