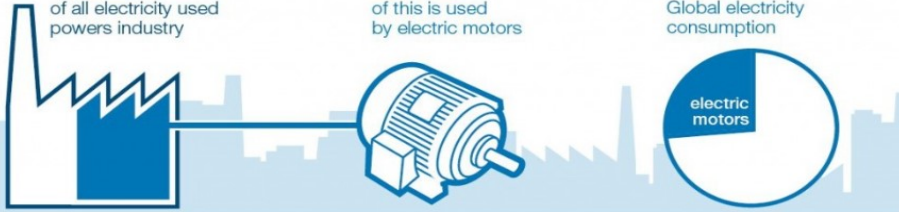


# Energy Efficiency: Saving Money and Increasing Production.

Energy Efficiency refers to using less energy to provide the same service.

42% of all electricity used powers industry  
 2/3 of this is used by electric motors  
 = 28% Global electricity consumption



## This will support:

Increased financial savings



Improved performance and reduced carbon footprint



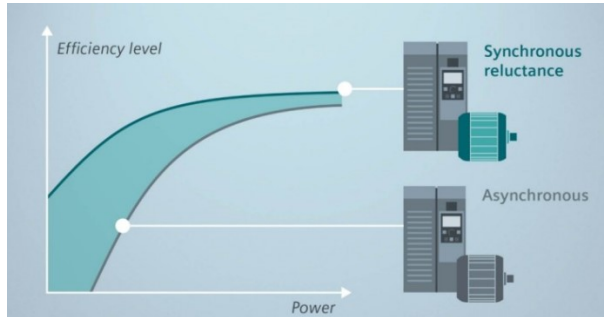
Increased longterm ethical reputation and security



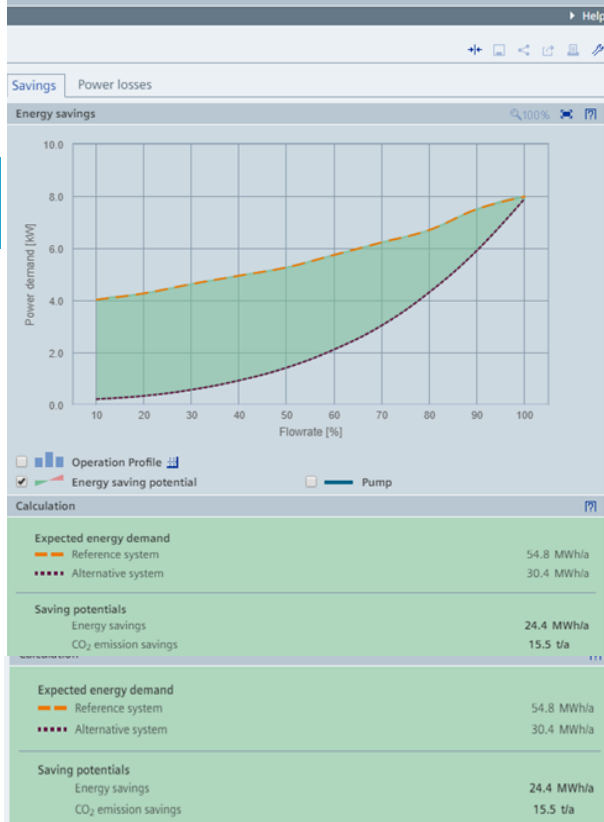
Paving a more energy efficient path for the future.

## Siemens motors guarantee energy efficiency.

- ▶ Siemens **Synchronous Reluctance** motors deliver high power density at low cost, the rotor operates at synchronous speeds so losses are minimal in comparison to an induction motor.
- ▶ The comparison of energy efficiency can be made using Siemens' **SinaSave** tool with its ability to output energy and cost saving potential.
- ▶ Using SinaSave reference system (a standard SIMOTICS motor) is compared to an alternative system (a SIMOTICS GP VSD400-line synchronous reluctance motor). A significantly lower **Power demand** can be seen for the alternative system, alongside **Energy savings** of 24.4 MWh/a and significant **cost savings**.



SinaSave  
Energy Saving and Amortization



## Siemens Smart Motors



- ▶ Siemens **Low Voltage** motors go digital, they are now equipped with the **Smart motor** concept.
- ▶ A **Smart Box** with integrated sensors, Wi-Fi communication module, and power supply mounted on the motor.
- ▶ This can be connected to **Mindsphere**: which allows cheap connection to the cloud and all its benefits, including analysis of the status data of the motor and predictive maintenance.
- ▶ **MindApp** is used to visualise all data from the user.

## For more information:

[Siemens.co.uk/reluctance-drive-system](https://www.siemens.co.uk/reluctance-drive-system)