« What Is Energy Efficiency? »

(Video Transcript)

What is energy efficiency?

In **physics**, energy efficiency means the **ratio of useful energy produced by a system** to **the total energy consumed to make it run**.

But it also refers to **efforts made to reduce the energy consumed by a system while maintaining its final performance at an equivalent level**.

In other words: **DOING THE SAME WITH LESS!**

Example: ***Energy efficiency for a home*** ***means consuming less gas or electricity but enjoying the same level of comfort.*** There are simple solutions out there:
Double glazing and energy-saving light bulbs. These consume less gas or electricity while providing the same level of comfort.

Example: ***Energy efficiency for a motor vehicle*** **means being able to cover the same distance while consuming less fuel.**

Why is energy efficiency so important?

- **Global demand for energy keeps growing STRONGLY.**
- It's **IMPOSSIBLE to fully meet demand**, even by building more power plants.
- It's **DIFFICULT** to make up for the decline in fossil fuels. Coal / Oil / Gas

So, we need to **use energy better**.
So, we need to **use less energy.**

That's energy efficiency!

It's especially vital in **the manufacturing and building industries**, which both consume a lot of energy.

Summary:
Energy efficiency **= efforts made to reduce the energy consumed by a system…**
… while still maintaining its final performance at an equivalent level.

At home = **consuming less energy while enjoying the same level of comfort**.

Optimizing energy efficiency in buildings and manufacturing is essential...
... to reduce consumption and meet increasing demand.