

When your product needs to be more efficient

5 points to check before deciding what needs to change

A new efficiency target often starts with a new product requirement. It can then affect the motor, the drive and the checks needed before the next product is released.

Why can the target change?

● CUSTOMER REQUEST

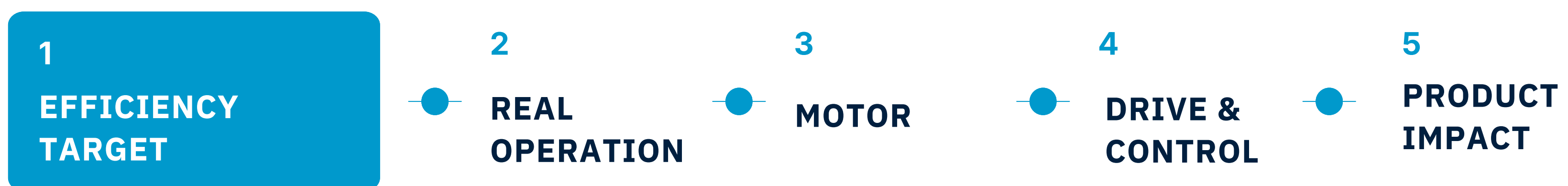
A customer asks for a more efficient product or lower energy use.

● REGULATION

EU energy rules set minimum efficiency levels for motors and for many products. These rules are reviewed over time.

● MOTOR TECHNOLOGY

Other products in your market are becoming more efficient, and your product needs to keep up.



The new target can affect different parts of the product.

What the new target can change

1 · EFFICIENCY TARGET

What changed?

The next product may need a higher efficiency level (for example, from IE3 to IE4) or lower energy use. Start with the product target, not with a component choice.

2 · REAL OPERATION

How is the product really used?

Efficiency levels are measured at full load. Many products work at partial load or lower speed most of the time. Check how the product is really used before you decide. The result can be different at other loads and speeds.

3 · MOTOR

Can the current motor still reach the target?

The current motor may already be good enough. If it is not, a more efficient motor type may be needed.

4 · DRIVE & CONTROL

Can the current drive work with the new motor?

A different motor type may also need a different drive or a different control method.

5 · PRODUCT IMPACT

What else may change?

A new motor or drive can change how the product heats up, how it behaves electrically and what must be tested again before release.

Turn the review into a decision

The five-point review can lead to three results. All three can be correct. The right one depends on how the product is used, not on the component.

● KEEP

The current motor and drive already reach the target.

Keep them and confirm the result in real use.

● ADAPT

The motor can still meet the target, but the drive or its settings need to change.

Most of the solution can stay. Only one part needs to change.

● CHANGE

The product needs a different motor type to reach the target.

Review the motor, the drive and the product together.

What can the review lead to?

The current motor and drive already reach the target

KEEP

The motor can still meet the target, but the drive or its settings need to change.

ADAPT

The current motor cannot reach the target

CHANGE

If you recognise one of these situations in your product

A new efficiency target does not always mean a full redesign. KELD can help you review the motor, drive and control together. We can identify what can stay, what may need to change and what should be checked before the next product is released.

Review my application with a KELD engineer →