Can we still save energy in the industrial sector?

French industrial energy consumption has decreased by 25% in 40 years, notably thanks to sustained energy saving efforts compared to other sectors (over the same period, energy use has increased by 20% in buildings, and doubled in transport). It may seem that the energy saving potential has been fully tapped, and any further saving would be very difficult and costly. But is it true?

In reality, the steady decrease of energy use in the French industry over the last 15 years can be largely explained by the economic downturn, the off-shoring of energy guzzling sites, and a shift of manufacturing towards assembly or more tertiary activities. Still, energy efficiency progress in industrial processes has also played a role, as in previous decades.

Despite these genuine efforts, the industrial energy saving potential remains substantial. Major improvements are possible through more performant motors, lighting, and specific processes, as well as increased recycling. Contrary to a misconception that any further energy cut would be uneconomical, productivity gains remain achievable by implementing new energy saving actions that often offer a quick return on investment.

A 2010 study from CEREN (a French expertise centre on energy data) revealed that a large part of the French industrial efficiency potential has a payback period of less than three years.