

## Energy and CO<sub>2</sub> savings potential of industrial insulation in Spain

**The energy savings potential of industrial insulation is large and exists across all regions, sectors, equipment and operating temperatures. The total cost-effective savings potential amounts to about 49 PJ and 3.4 Mt CO<sub>2</sub> per year, of which**

- **40 PJ and 2.8 Mt CO<sub>2</sub> per year in industry, and**
- **9 PJ and 0.6 Mt CO<sub>2</sub> per year in fossil fuel-fired power generation.**

The annual savings potential is more than:

- > The energy consumption of 1 200 000 households
- > The CO<sub>2</sub> emissions of 1.7 million middle class cars each running 12 500 kilometres per year.

A large part of this potential can be tapped cost-effectively with payback times less than one year:

- > Insulating bare surfaces to cost-effective levels and repairing damaged insulation in industry requires initial investments of about 75 million euros.
- > This one time investment would represent an energy savings potential of about 70% of the total potential, which would save industry 400 million euros every year.

### How to tap the potential?

#### *Step 1: Insulate uninsulated parts and replace damaged insulation*

If all uninsulated parts would be insulated, and damaged insulation would be repaired, this would reduce industrial energy consumption by approximately 4%.

#### *Step 2: Evaluate the cost-effectiveness of insulation and consider upgrading*

Insulating all surfaces to cost-effective levels would avoid about two-thirds of current heat loss.

#### *Step 3: Involve insulation experts\* early in the planning process of a new build, overhaul or retrofit to realise cost-effective and energy saving levels*

Sufficient space available is key to enabling realisation of cost-effective and energy-efficient insulation levels.

\* EiiF certified TIPCHECK engineers (Technical Insulation Performance Check) carry out independent energy appraisals and evaluate the money and energy savings potential. More information on [www.eiif.org](http://www.eiif.org)

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