

Agreed strategic targets to continue efforts to make EU industry less energy intensive and more competitive

For the two identified sectors, we have classified their sector specific technologies according to their maturity and economic viability:

- a) the existing technologies which have been demonstrated but are not (yet) economically viable, i.e. with payback period longer than 3 years¹
- b) the emerging technologies, which still need to be validated in pilot or demonstration plants

Priorities ²	R&I Targets (baseline 2015)	Indicators
1. Sector specific R&I: Increasing the energy efficiency of our most energy consuming industries by increasing the cost effectiveness of not yet economically viable technologies (TRL>=7) through technological development, while striving to reduce GHG emissions proportionally	By 2030, at least 1/3 ³ of the technical potential energy savings related to sector-specific technologies, identified for Iron & Steel and Chemical & Pharmaceutical, become economically viable (Payback <= 3 years)	Progress of the cost effectiveness of the identified technologies; cumulated energy saving potential of technologies reaching economic viability. Two sets of Assumptions: <ul style="list-style-type: none"> • Fixed energy prices & production volume • Actual energy prices & production volume
2. Sector specific R&I: Increasing the energy efficiency of our most energy consuming industries by progressing emerging technologies (TRL 4 to 6), while striving to reduce GHG emissions proportionally	By 2030, 1/3 of the currently promising emerging technologies are successfully demonstrated at large scale (TRL>=8)	R&I Maturity progress (lab, pilot, large scale demonstration)
3. Cross-cutting R&I: maximising the recovery of industrial excess heat/cold in a cost efficient manner	By 2025, develop and demonstrate (to TRL 8) cost effective excess heat/cold recovery solutions (e.g. heat exchangers, upgrade to higher temperature, storage, distribution, heat-to-power, heat-to-cold, power-to-heat)	Evolution of solutions maturity (TRL), of their cost effectiveness and energy efficiency performance with reference to Best Available Techniques (BAT) (Industrial Emissions Directive)
4. Cross-cutting R&I: maximising the energy efficiency of cross-sector industrial components in a cost efficient manner	By 2025, develop and demonstrate (to TRL 8) industrial components whose losses are reduced by 15% (e.g. boilers, dryers, pumps, compressors, fans, conveyors ... all of which systems typically contain motors and drives)	Evolution of solutions maturity (TRL), of their cost effectiveness and energy efficiency performance with reference to BAT / Progress of minimum energy performance standards
5. Cross-cutting R&I: Improving system integration, optimal design, intelligent and flexible operation, including industrial symbiosis , to increase energy and resource efficiency while striving to reduce GHG emissions	By 2025, develop and demonstrate solutions enabling small and large, industries to reduce their energy consumption by 20% while striving to reduce GHG emissions proportionally	% of specific energy savings (J/unit of product or J/goods produced in industrial park) achieved by at least 10 projects in at least 5 industrial sectors

¹ Stakeholders agreed a payback of 3years (not 2) is more realistic (vs energy prices) and still a reasonable economic threshold

² There is no ranking among the five priorities. They are numbered for easy reference.

³ The quantification of the targets for Iron & Steel and Chemical & Pharmaceutical are detailed in Annexes 1 & 2