

# Publically available database highlights the multiple impacts of energy efficiency

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Credit: AI-generated image ([disclaimer](#))

The COMBI project recently concluded three years of research on the multiple impacts of energy efficiency. The consortium's findings further add to the already long list of benefits of a transition towards a more energy-efficient European Union.

Climate change, the economic crisis, the Fukushima disaster and the EU's strong reliance on external suppliers for the likes of oil and gas are just some events that have turned [energy efficiency](#) from a noble ideal to a no-brainer. But even though the EU's commitment to [energy](#) efficiency seems unshakable, the rather sad truth is that its potential is still largely underestimated.

When thinking about energy efficiency, the first benefits that come to mind are often the lower CO<sub>2</sub> emissions and production cost. But there is much more to it: employment; health; GDP; energy importation; carbon prices; competitiveness; air pollution, and energy system costs can all be impacted by changes in energy efficiency. And whilst the European Commission has recently started to consider some these so-called multiple impacts (MIs) in its impact assessments, many of them are still overlooked, notably at the national level.

"The reality is that MIs make the picture more complex. Instead of looking at energy efficiency and a few key impacts only, you suddenly have to link many policy fields/areas that are often outside the scope, interest and expertise of relevant policy-makers, media or scientists," deplores Dr. Stefan Thomas, Director of Wuppertal Institut's Division Energy, Transport and Climate Policy. The current absence of a standard set of indicators and methods to calculate energy cost savings, along with the unavailability of methods and data on MIs, only make things more complicated.

To solve this problem, Dr. Thomas and his partners under the COMBI project have gathered a team of experts from all relevant fields. They gathered data on 21 energy efficiency improvement actions for the 28 EU Member States and developed two scenarios for 2030 – the COMBI reference and efficiency scenarios.

"From thereon, we quantified energy savings and investments needed in

each scenario, for each action and Member State. Then, experts modelled impacts in their respective field of expertise. These included both physical indicators and monetizing where possible. Finally, we pulled all outcomes together in a joint database, eliminating any overlaps, and developed an online tool that makes all impacts accessible in graphs and numbers. This is a real innovation that would be very helpful also for official COM Impact Assessments," Dr. Thomas explains.

A striking result of the project lies in how, on average, MIs increase the economic benefit of energy efficiency to society by approximately one third. "Of course, the effects vary between countries, sectors or individual actions. The health impact of a modal shift from road to rail transport in terms of [air pollution](#), for example, will depend on the degree of modal shift that has already happened, and many effects are not linear. That said, the absolute results on MIs come close to what would be the [impact](#) of reaching the new 32.5 percent energy efficiency goal for 2030 in the revised Energy Efficiency Directive," Dr. Thomas points out.

Stakeholders' feedback has been highly positive so far. Several people from DG ENERGY expressed interest in project results, whilst researchers and several organisations have already taken up the project's results to communicate on and advocate energy [efficiency](#). COMBI's results will even be presented to the German expert commission on coal exit plans.

"In the short term, we will keep distributing project results. We were not able to identify a suitable call in the 2018 European Horizon 2020 programme to apply for a follow-up project, but we will keep looking for possibilities at European and national level," Dr. Thomas concludes.

Provided by CORDIS

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