PRIORITY ACTION EIGHT

ACTIONS TO ALLEVIATE ENERGY POVERTY

WHAT ARE ACTIONS TO ALLEVIATE ENERGY POVERTY?

Energy poverty is the incapacity of a household to maintain reasonable conditions of indoor comfort. Actions to alleviate energy poverty include the initiatives, measures and policies put in place to mitigate increases in energy prices or to facilitate access to energy efficiency improvements, such as building renovation programs or funds to install solar panels or heat pumps.

WHAT ARE THE BENEFITS OF THE ENERGY SAVINGS ACHIEVED?

Although research has shown that measures targeting energy efficiency improvements for energy poor households do not always lead to energy savings, they have other important impacts. These benefits include higher comfort levels, healthier indoor air quality, reduction of stress and illness, and increase in self-esteem (JRC, 2020).

WHAT ARE THE ENERGY SAVINGS OPPORTUNITIES?

The energy savings opportunities encompass renewable energy generation for heating and building insulation as well as tailored feedback to optimise consumption. These actions are expected to allow energy poor households to benefit from energy services while making their consumption adequate to their needs.

WHAT MAKES CALCULATING ENERGY SAVINGS CHALLENGING?

The prebound effect, the result of under-consumption in inefficient buildings (Sunikka-blank et al., 2012) and the rebound effect, caused by over-consumption post- renovation (Galvin, 2015a), impact the success of renovation (Friege & Chappin, 2014). Both effects can lead to the miscalculation of energy savings and emissions (Teli et al., 2016).

WHAT IS NEEDED TO IMPROVE ENERGY SAVINGS CALCULATIONS?

Correction factors are needed to adjust the real outputs of renovation programs that target households in energy poverty. Most of these programs concern the renovation of buildings, the replacement of heating systems, energy advice and the replacement of household equipment. Therefore, there is a need to develop calculation formulas covering these specific actions.