

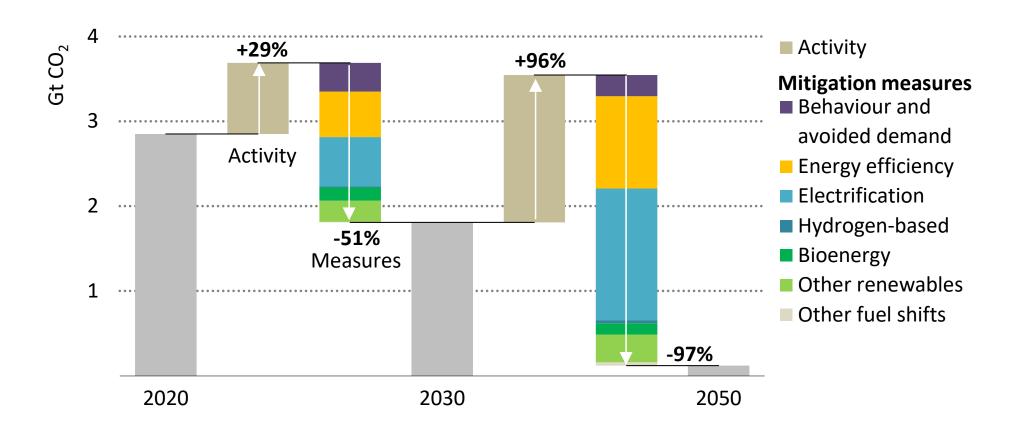
Transformation in the heating sector needed to reach the climate ambitions

Global Clean Energy Action Forum, 22nd September 2022 Araceli Fernández Pales, Head of Technology Innovation Unit

Quick policy action is needed to put buildings on track towards net zero



Global direct CO2 emissions reductions by mitigation measure in buildings in the NZE

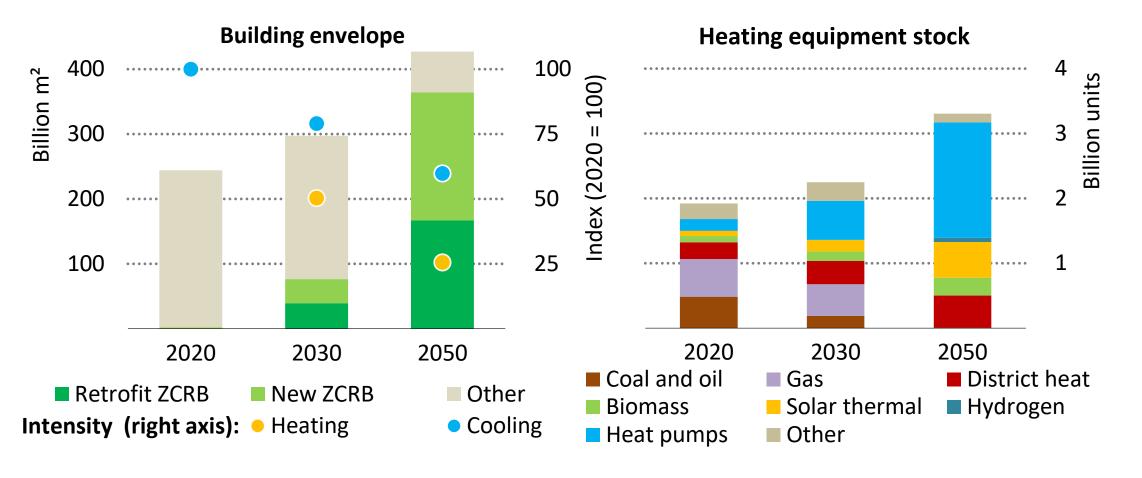


Electrification, energy efficiency and renewables integration are the key levers to decarbonise buildings in the NZE, but behavioural changes are also important, especially in the short term

Building retrofits and fuel shift for heating in buildings should be in the spotlight



Global building and heating equipment stock and useful space heating and cooling demand intensity changes in the NZE

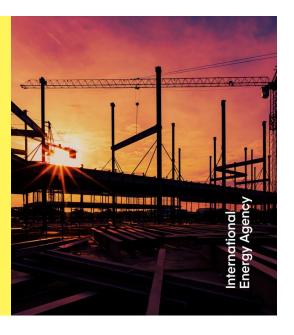


By 2030, retrofit rates need to increase to about 2.5% per year in advanced economies, while heat pump deployment should reach around 1.8 billion units by 2050

A wide range of solutions are available and innovation can broad this even further



Technology and innovation pathways for zero-carbon-ready buildings by 2030



Energy Technology Guide

Clean Energy Technology Guide

Company Technology G

1 September 2022

Technology and innovation pathways for zero-carbon-ready buildings by 2030:

 Strategic vision of experts from the IEA Technology Collaboration Programmes (TCPs) on how to help achieve some of the most impactful short-term milestones for the buildings sector

ETP Clean Energy Technology Guide:

Breakdown of around 120 building technologies that can contribute to achieve the goal of net-zero emissions



Innovation and Policy Measures to Solve the **Heat Challenge**

Global Clean Energy Action Forum September 22, 2022 Pittsburgh, PA, USA







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