

2024 Natural Gas Achievable Potential Study

Appendix P1: Measure-Level Potential Diagnostic Plots

Prepared for:



Ontario Energy Board

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guidehouse.com

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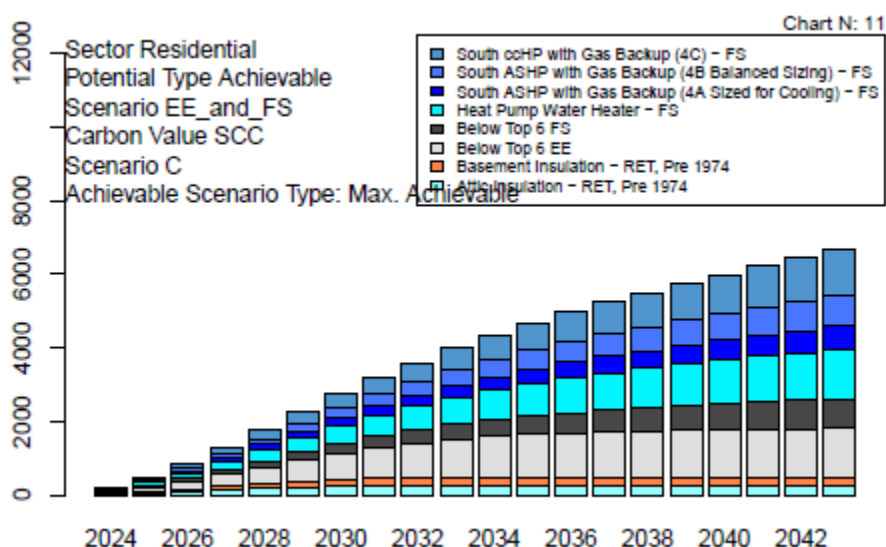
Appendix P1. Diagnostics Plots Introduction

In the course of presenting interim draft potential results to stakeholders Guidehouse developed a set of diagnostic plots of measure-level potential by sector and sub-sector. These data visualizations focused on the six most impactful measures for each combination of sector and scenario, presented in an easy-to-use static PDF output, comprehensively for all various potential types, sectors and scenarios.

These plots are referenced throughout the report. This appendix provides, as a reference to the interested reviewer, a comprehensive set of these plots by sector and sub-sector, by potential type and by scenario within each potential type.

The first section presents plots at the sector level. The subsequent section presents them at the sub-sector level. Each of these sections is separated by a title page (“Sub-Sector Level Plots” and “Sub-Sector Level Plots”).

In each plot, measure-level potential in each year is presented as a stacked bar, with each coloured “wedge” representing a separate measure or group of measures. See, for example, the Residential Scenario C plot presented below.



Only the most impactful measures are shown as distinct wedges in the columns. Less impactful measures are combined in the light and dark grey wedges (“Below Top 6 EE” and “Below Top 6 FS” categories). The selection of which measures to identify in the plots is based on their total potential by potential type, sector, and scenario type, across the first 10 years of the period of analysis. Only the six measures with the highest potential are shown individually. The top six measures are different depending on the sector, scenario (EE and FS or EE only), and the potential type (Economic or Technical).

The y-axis of each plot presents potential in millions of cubic meters.

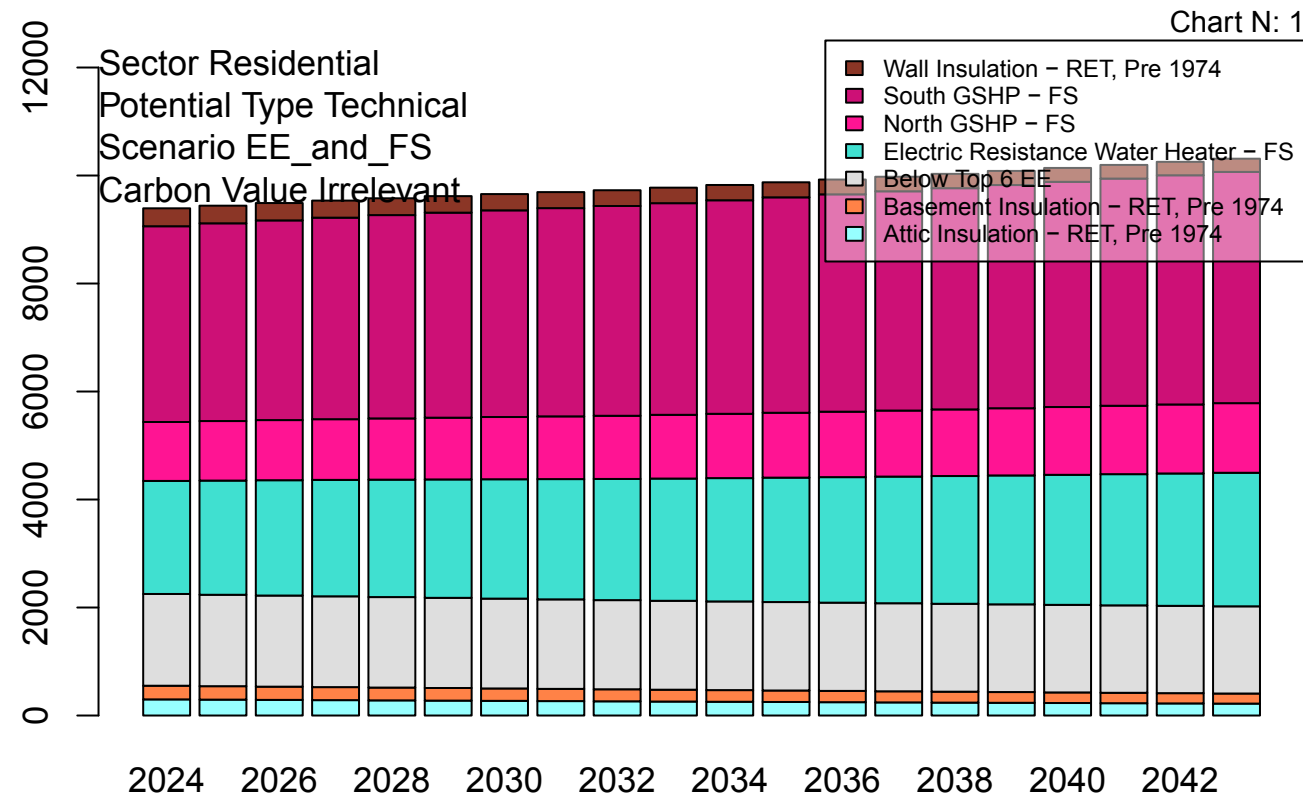
Text in the top left corner of each plot provides the critical information for identifying the plot:

- the sector¹ (Residential, Commercial, or Industrial),
- the potential type (Technical, Economic, Achievable)
- the scenario (see below for details); and
- the carbon value used.

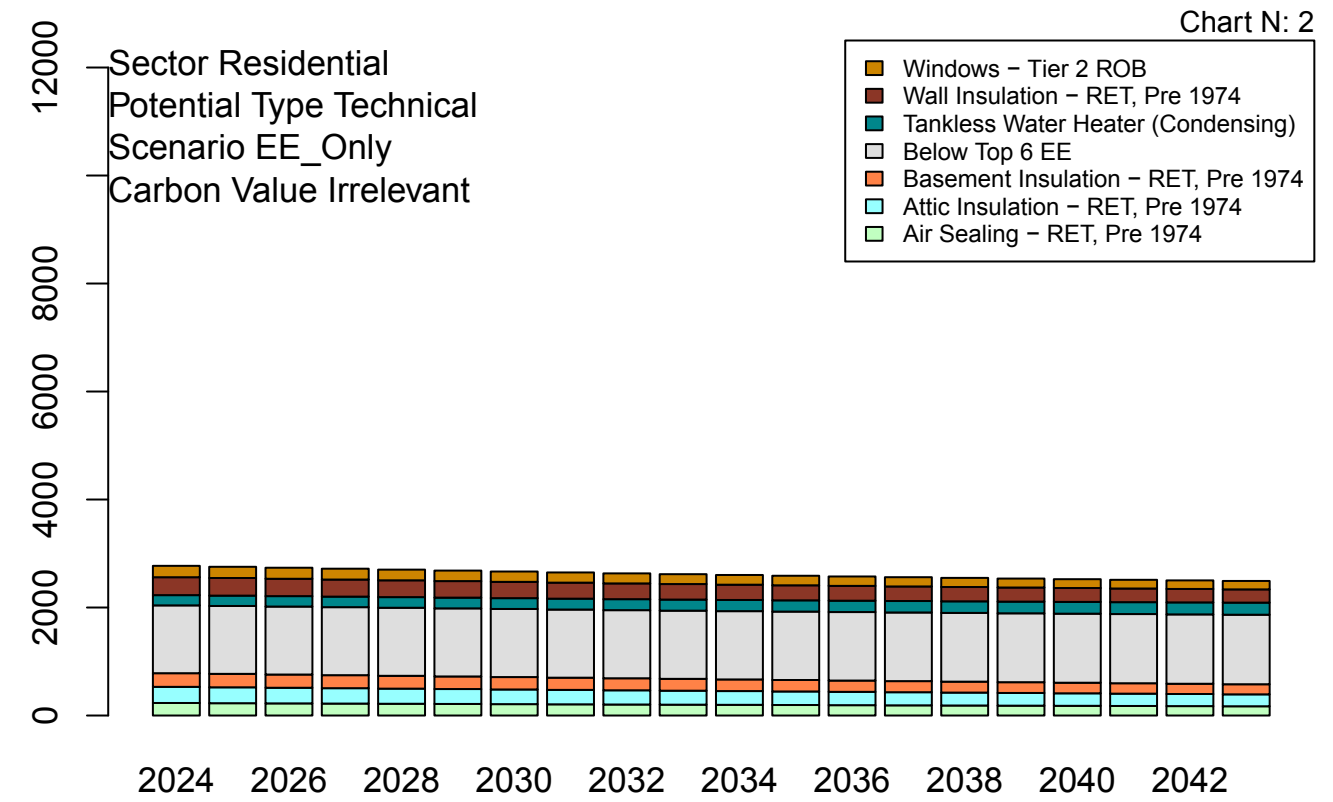
For Technical and Achievable potential the “Scenario” may either be EE_and_FS, the core scenario that considers all measures, or EE_Only, the sensitivity scenario that includes only energy efficiency measures and excludes fuel switching measures.

¹ Sub-sector level plots also identify the sub-sector name immediately below the sector name.

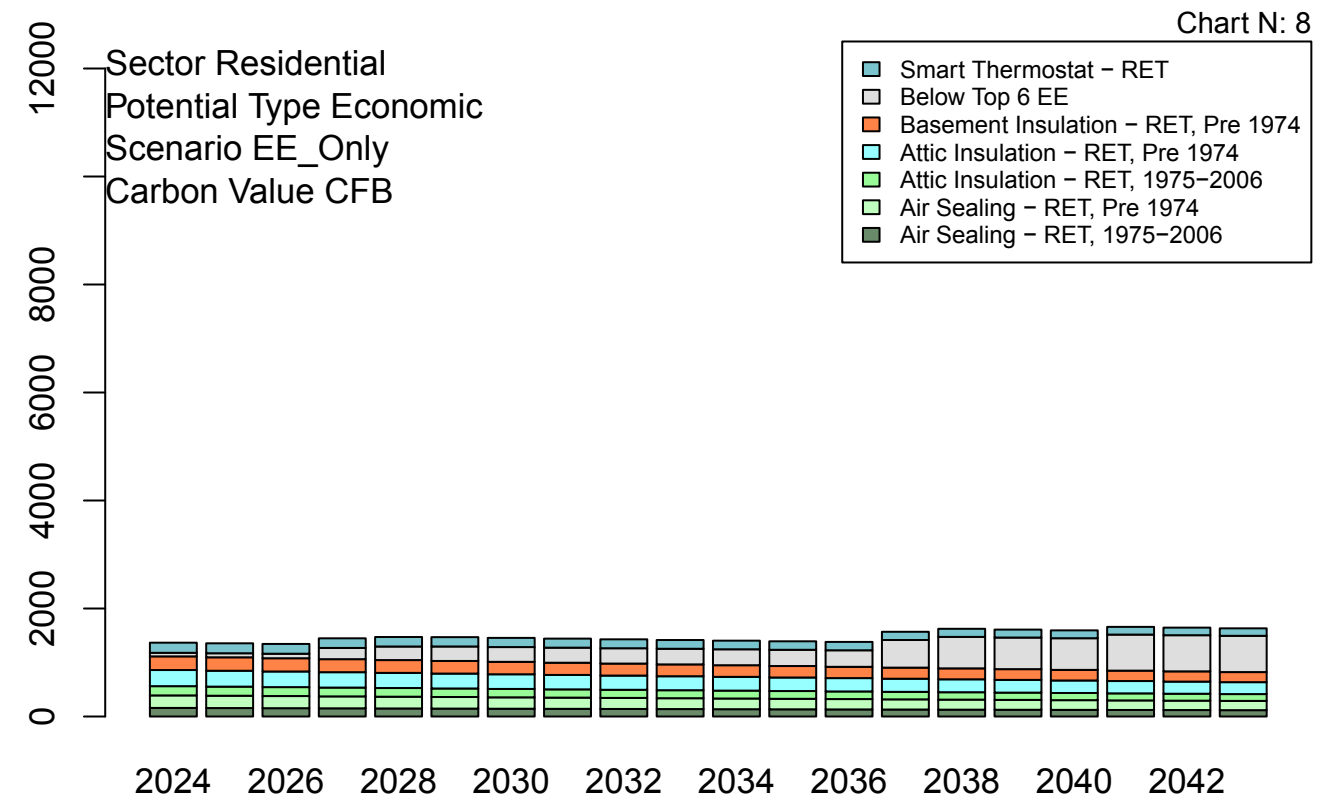
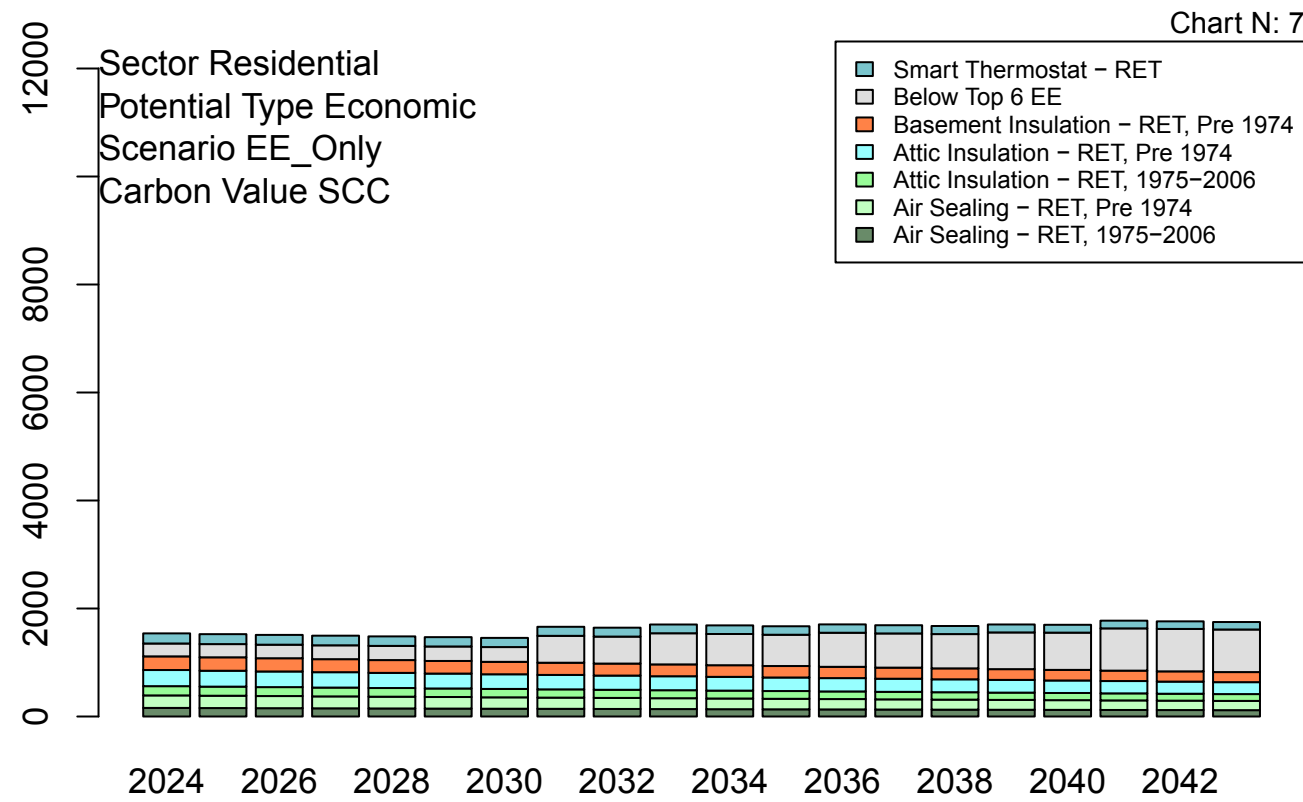
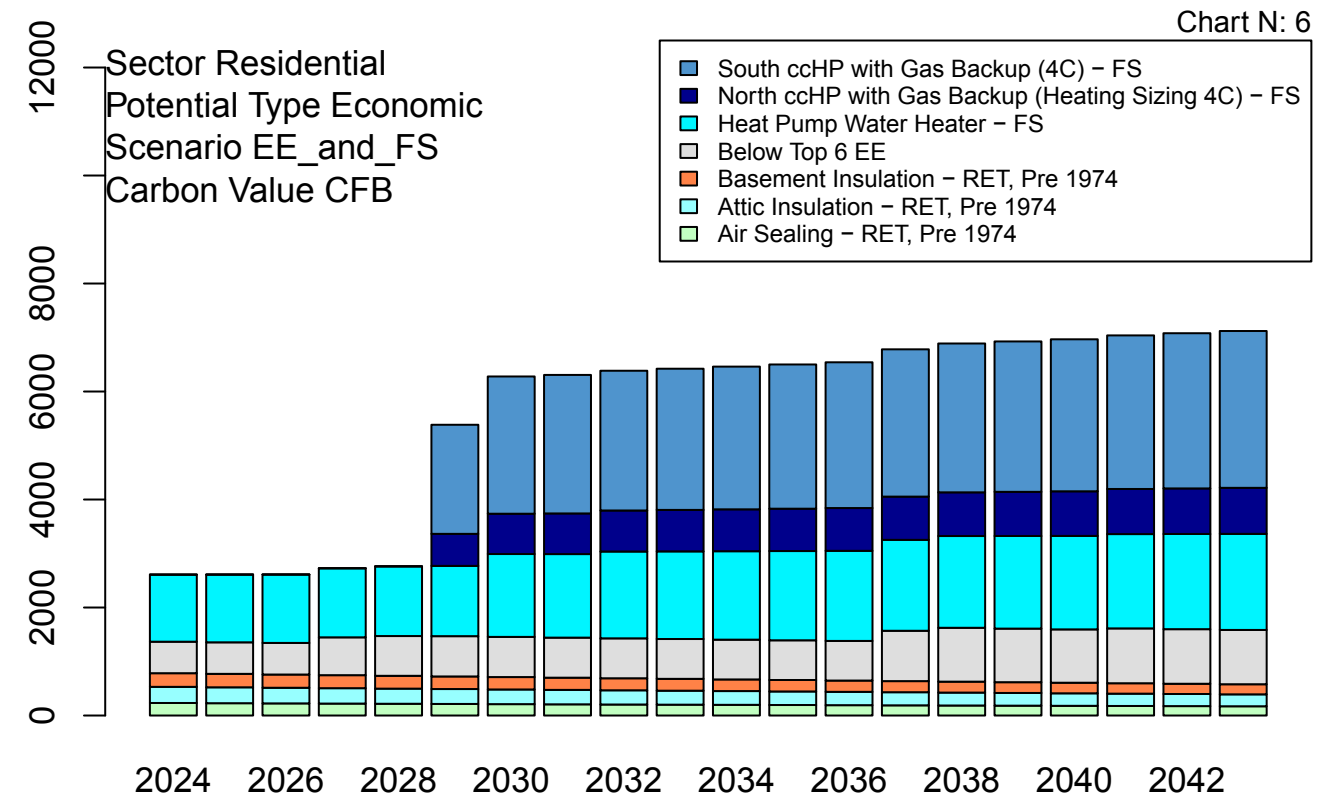
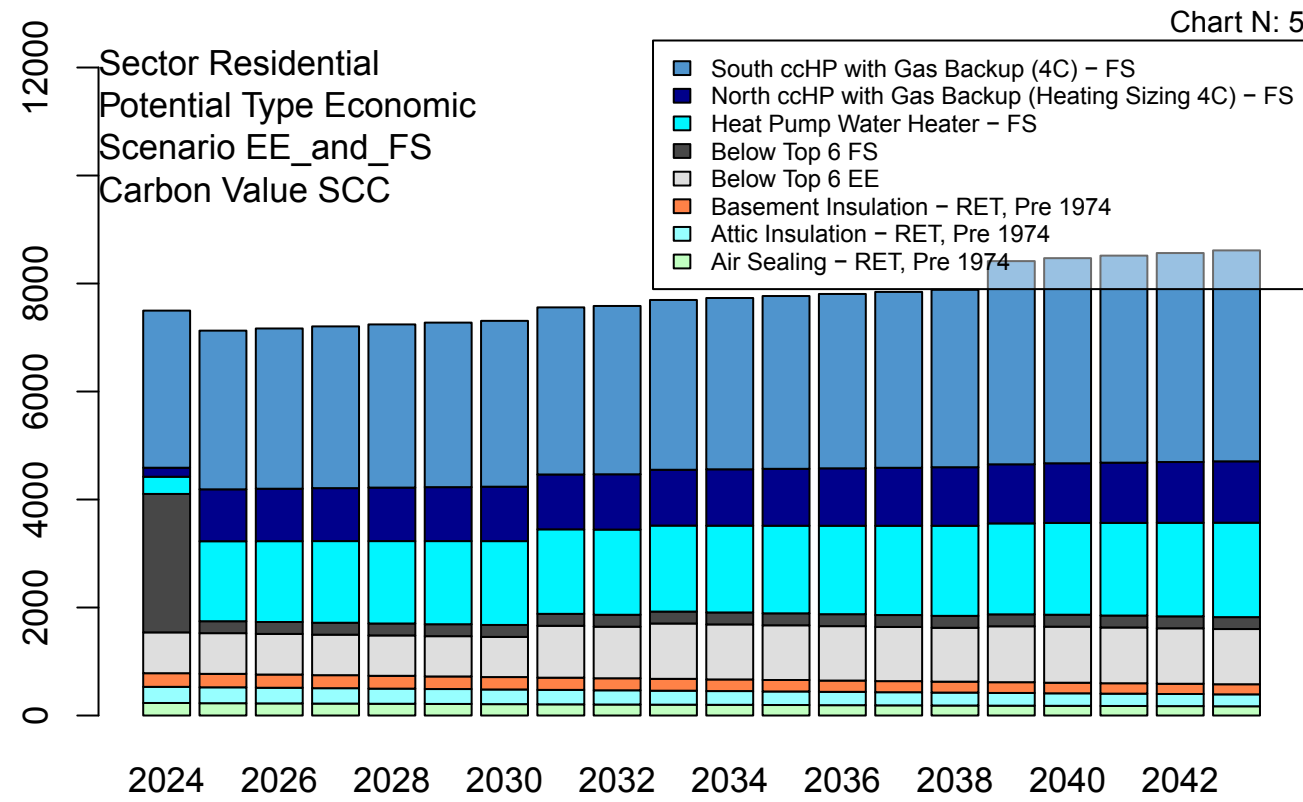
Sector-Level Plots

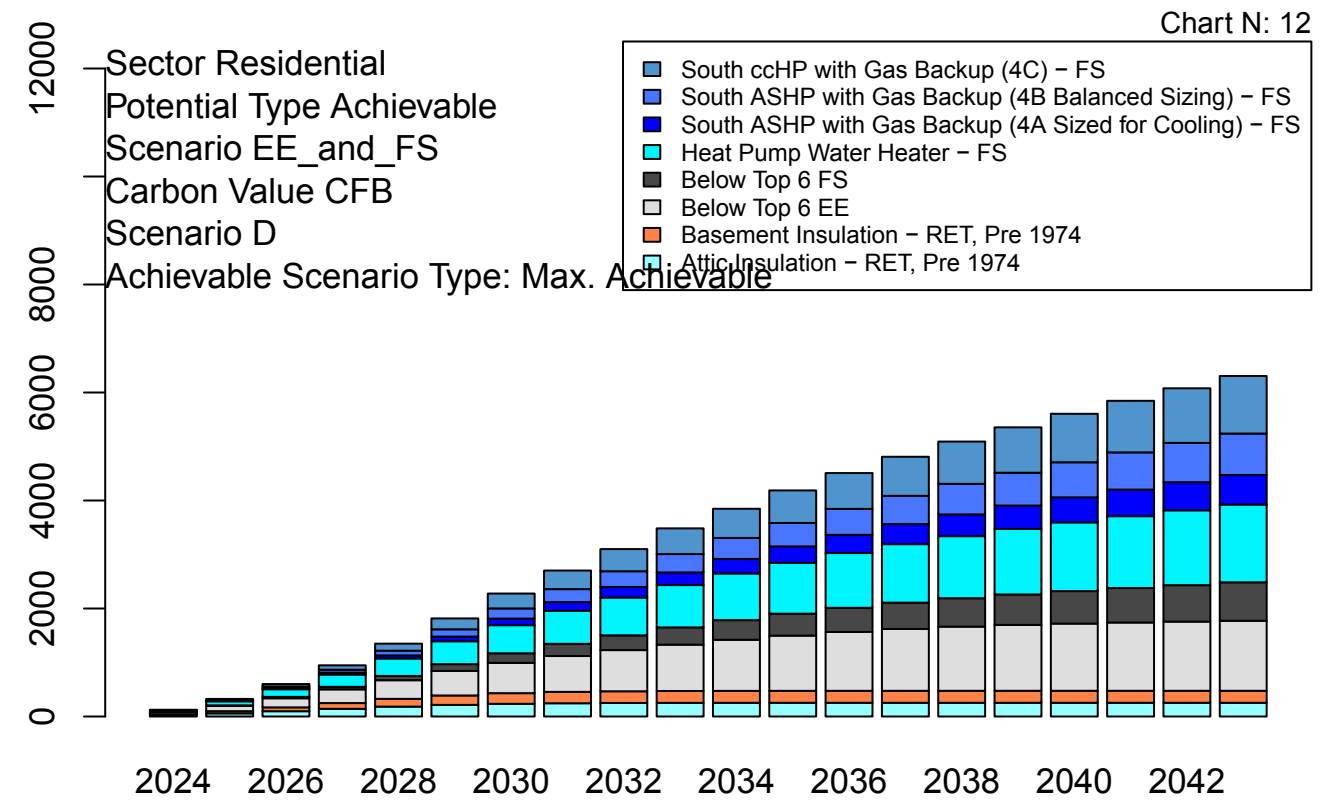
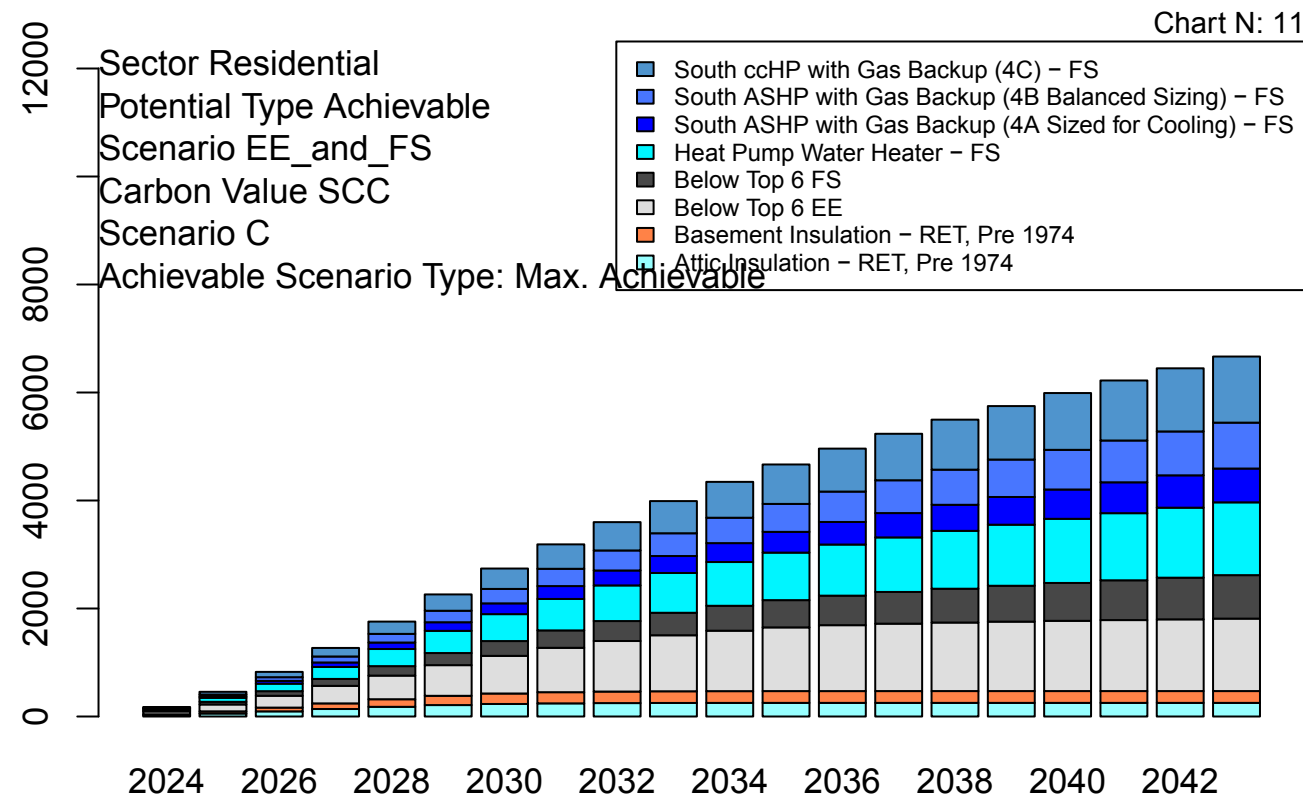
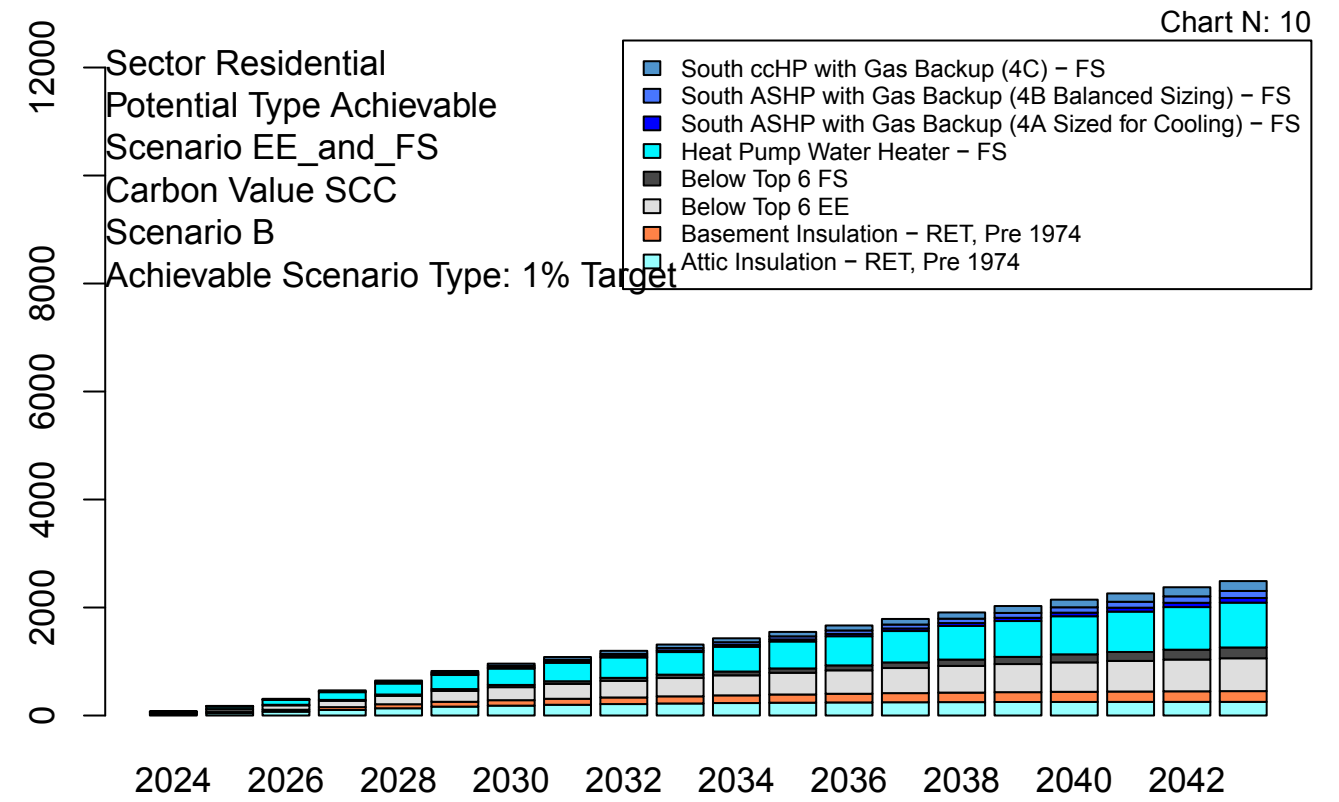
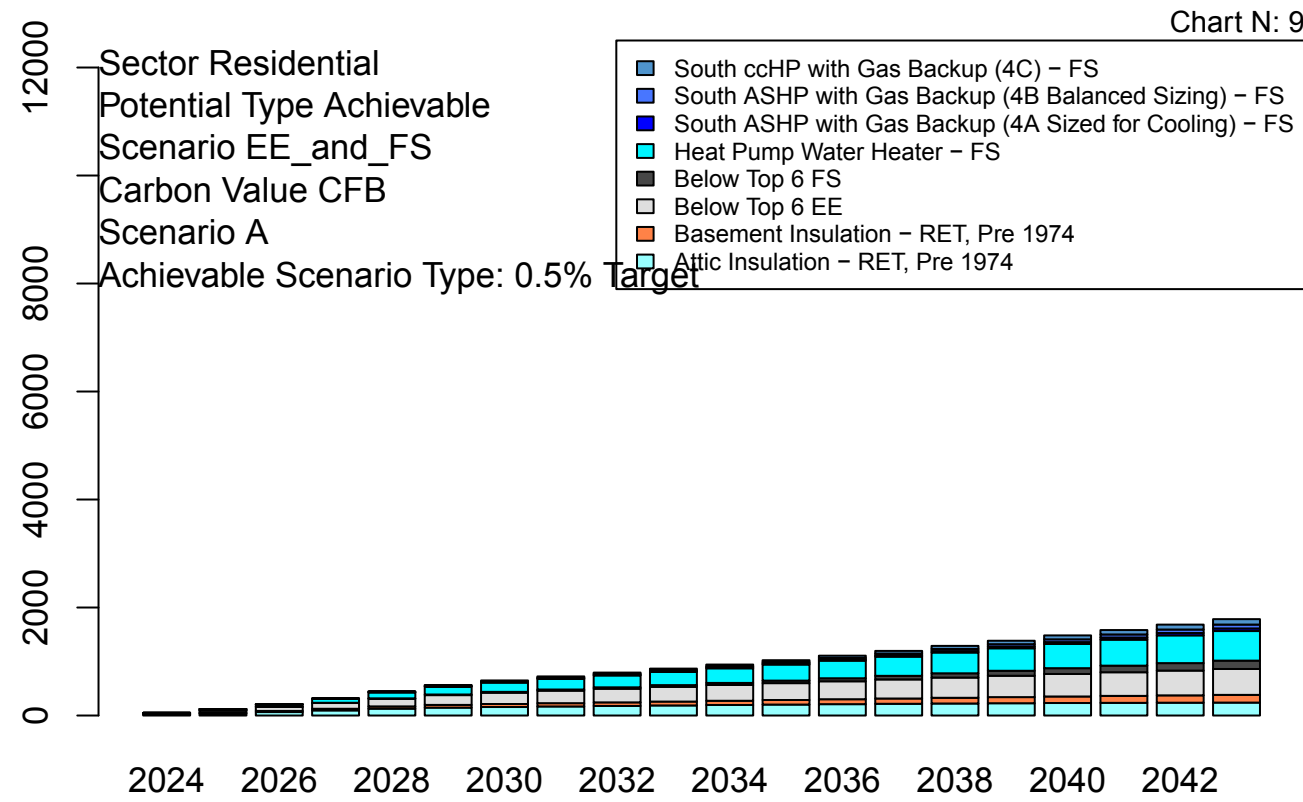


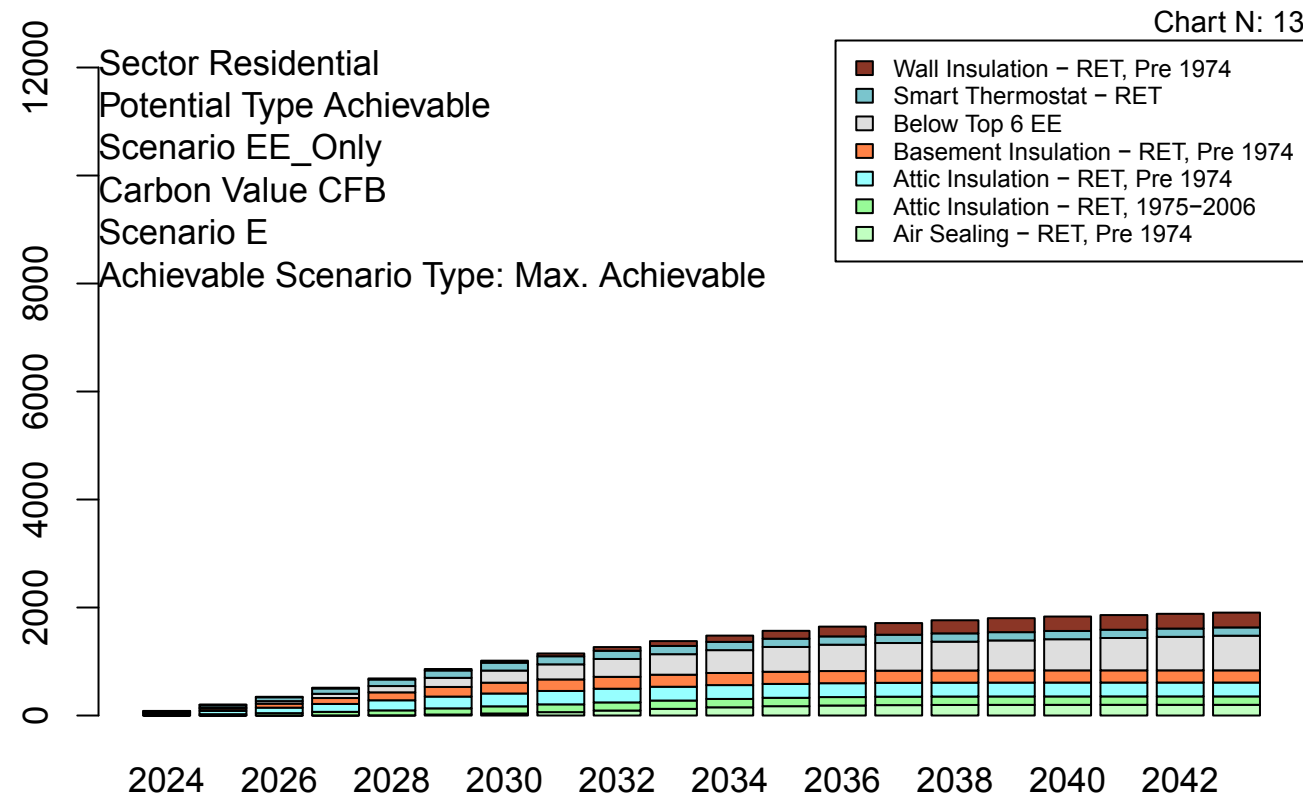
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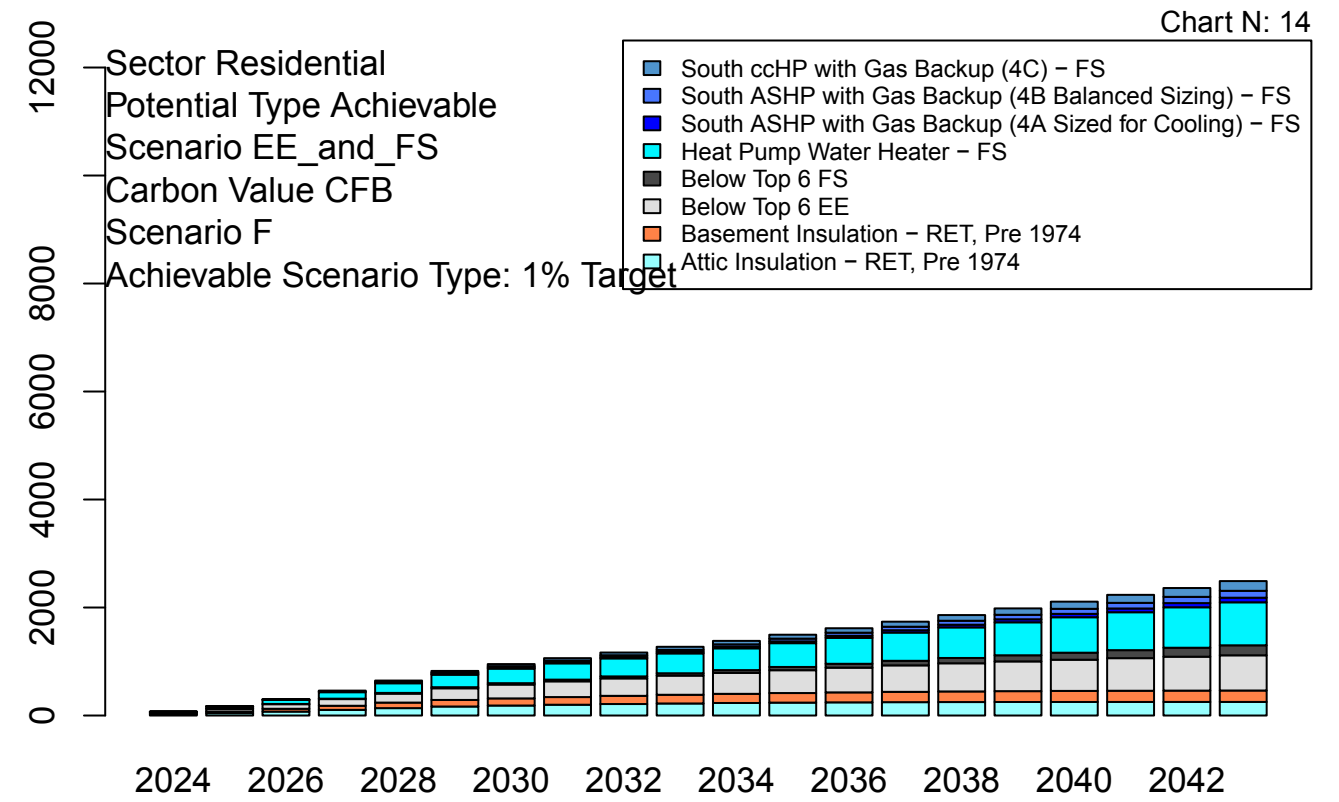
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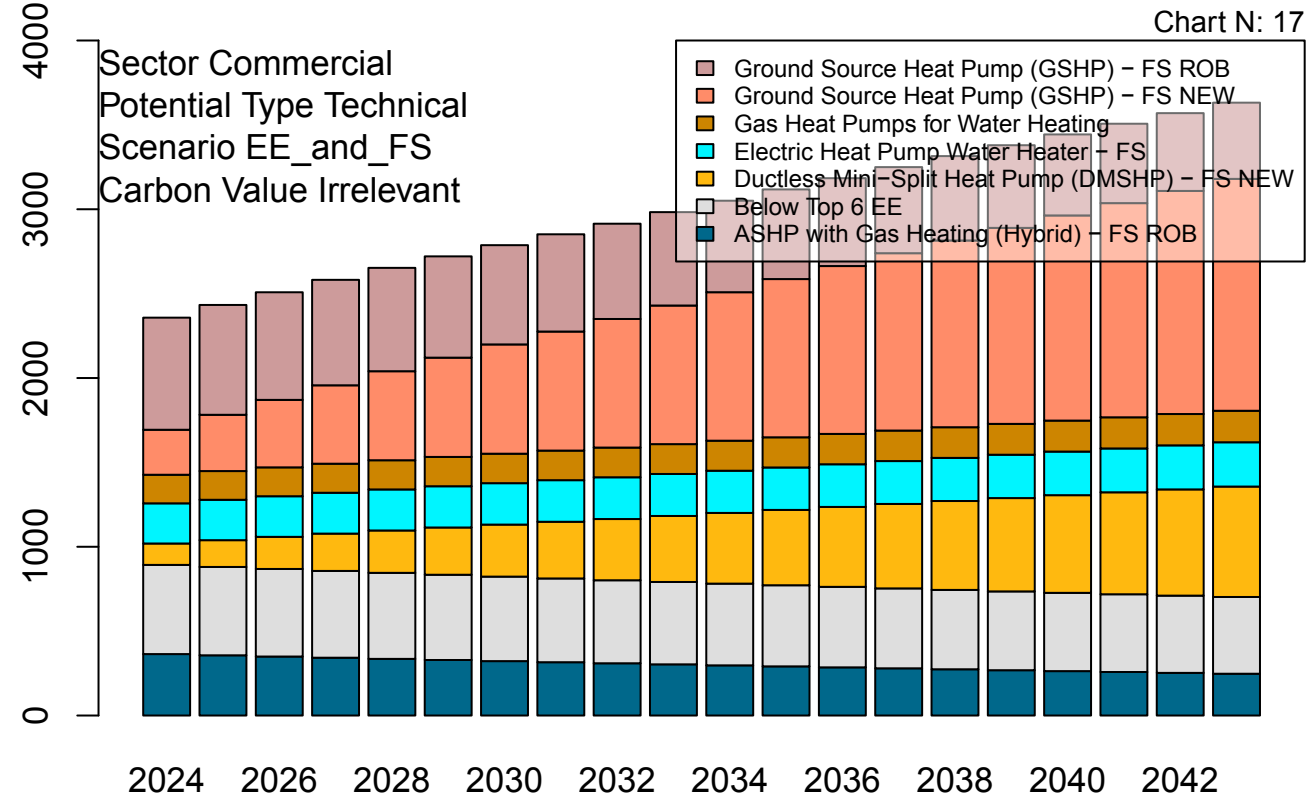




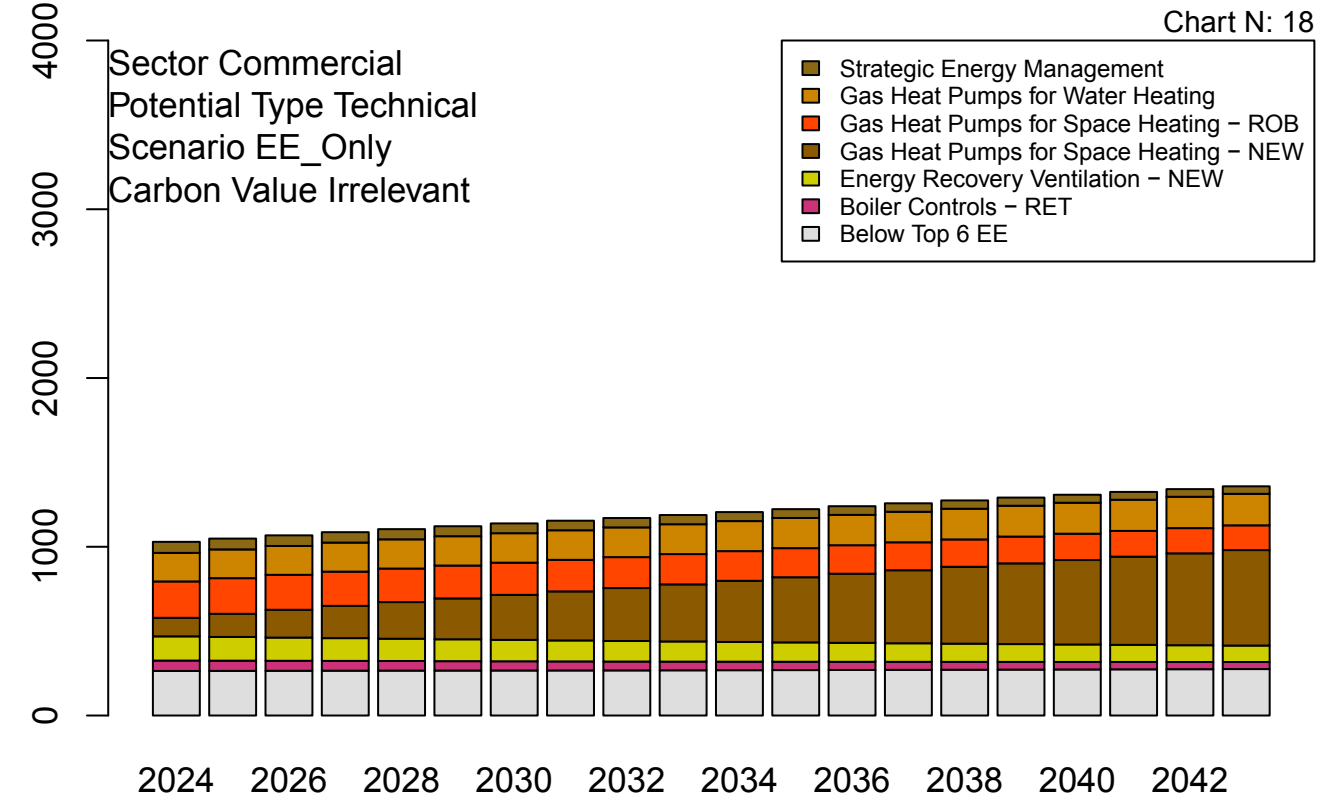
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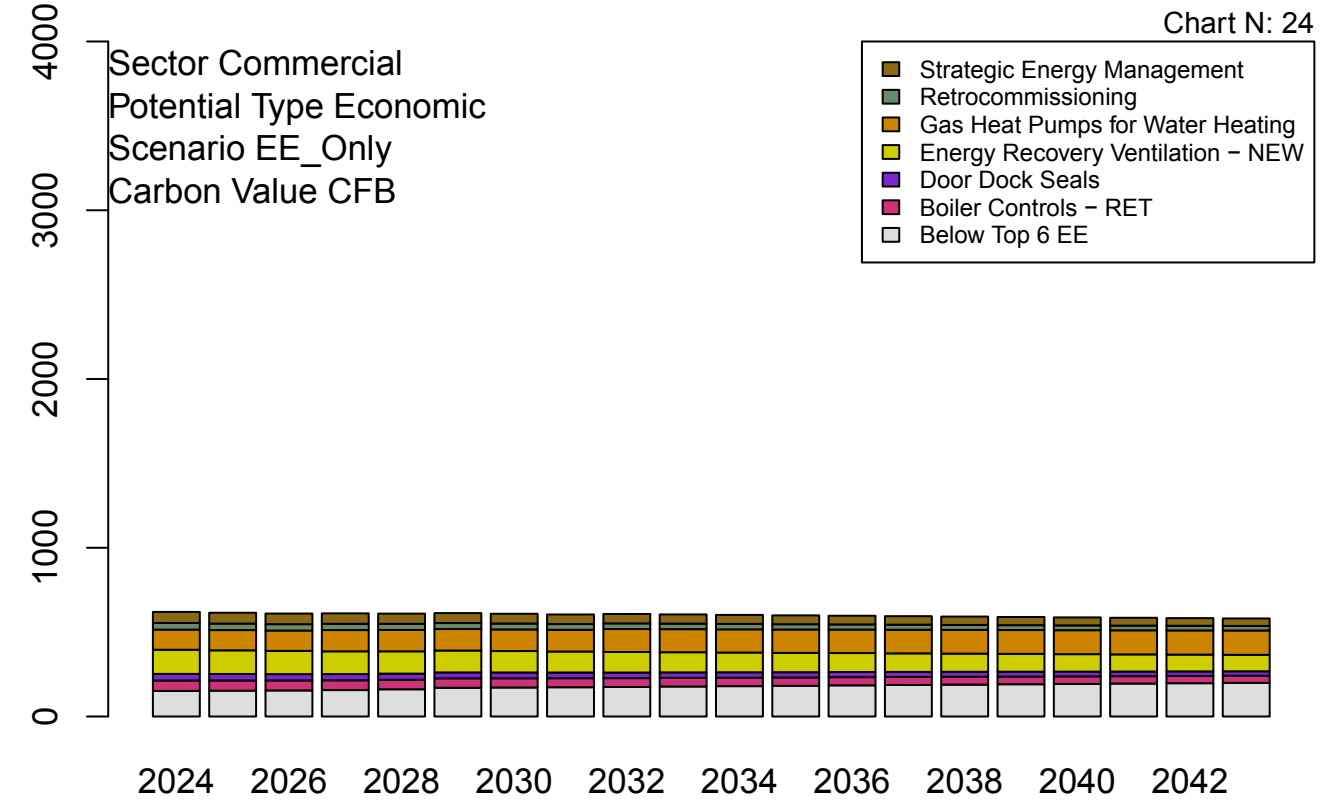
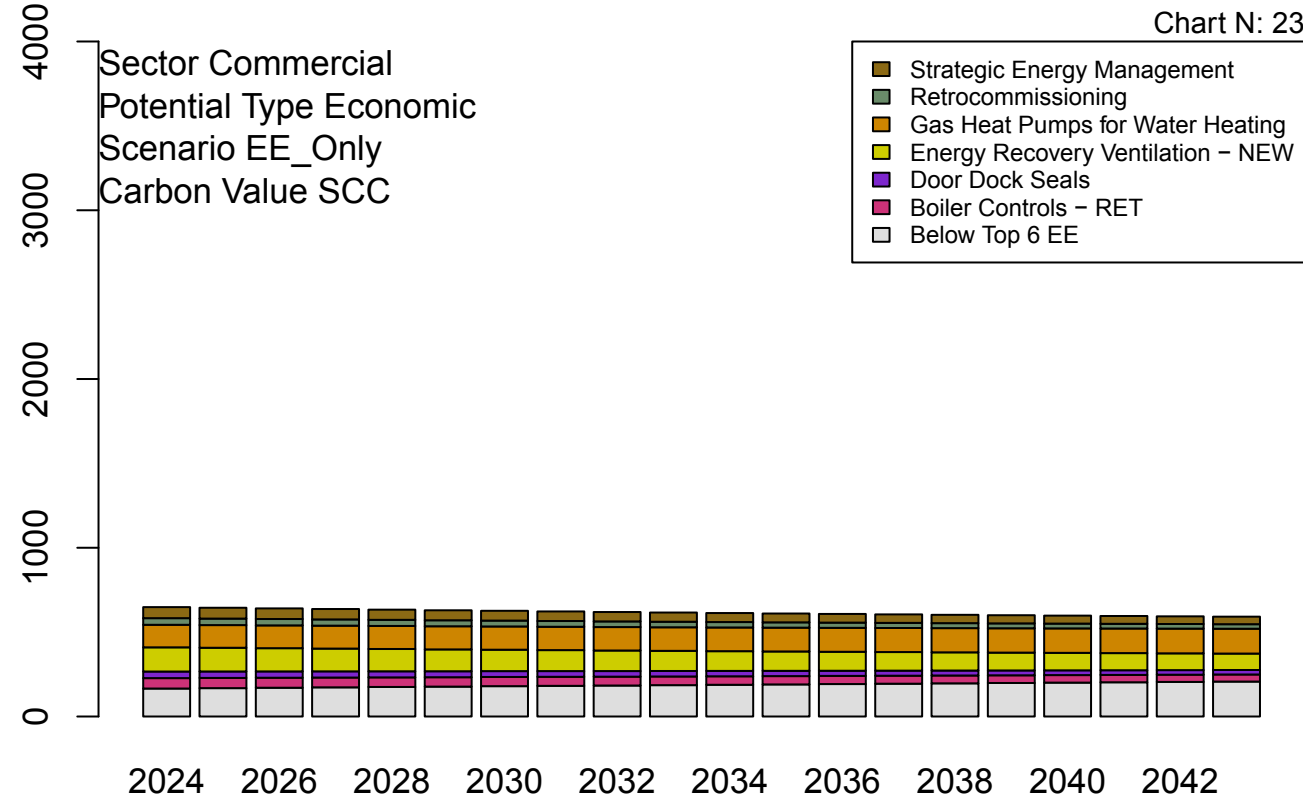
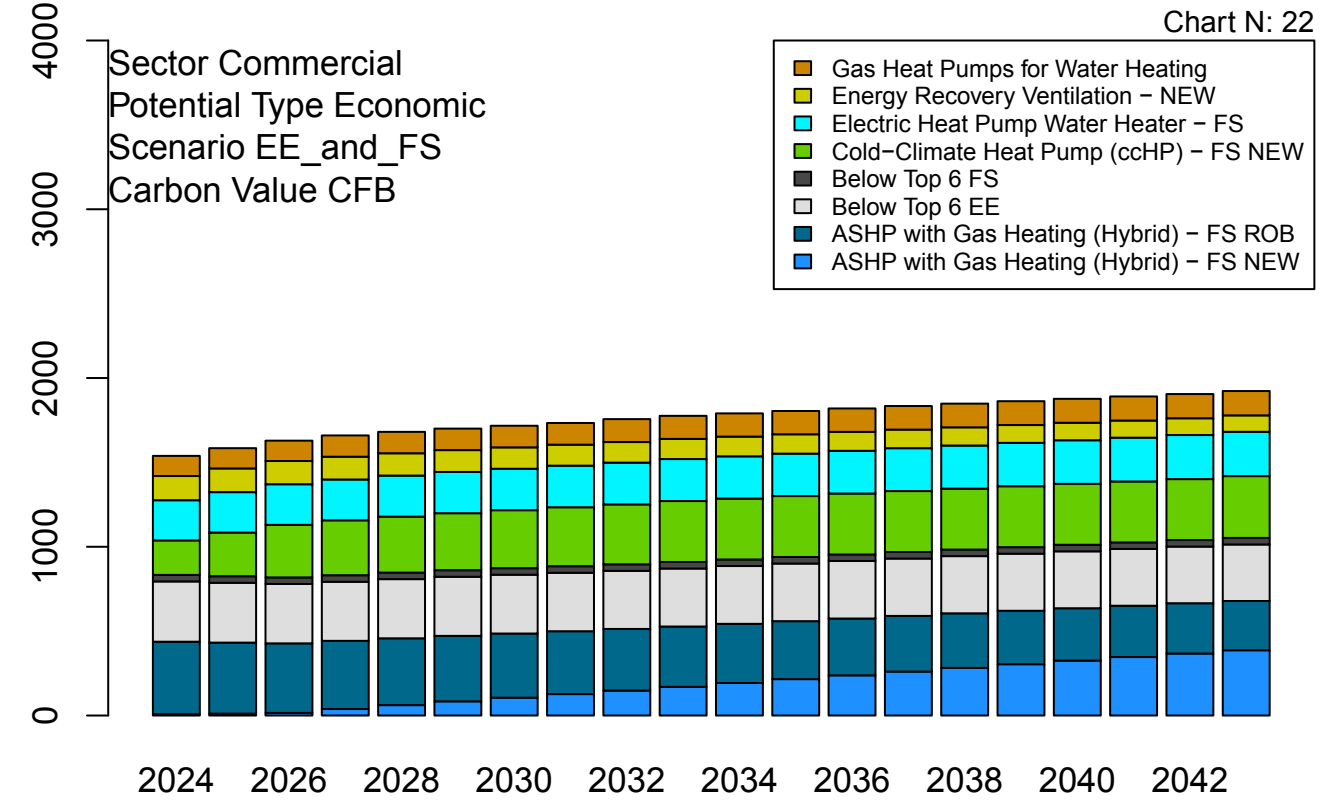
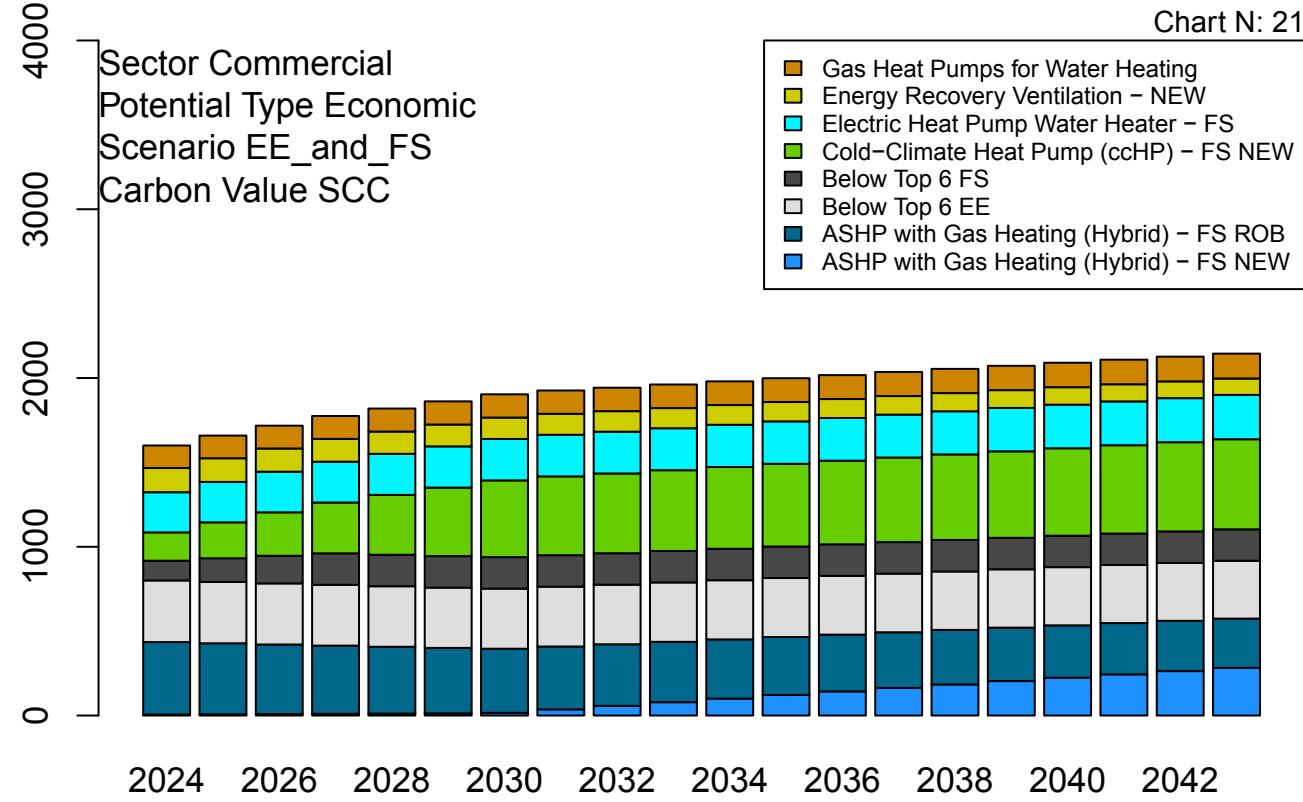
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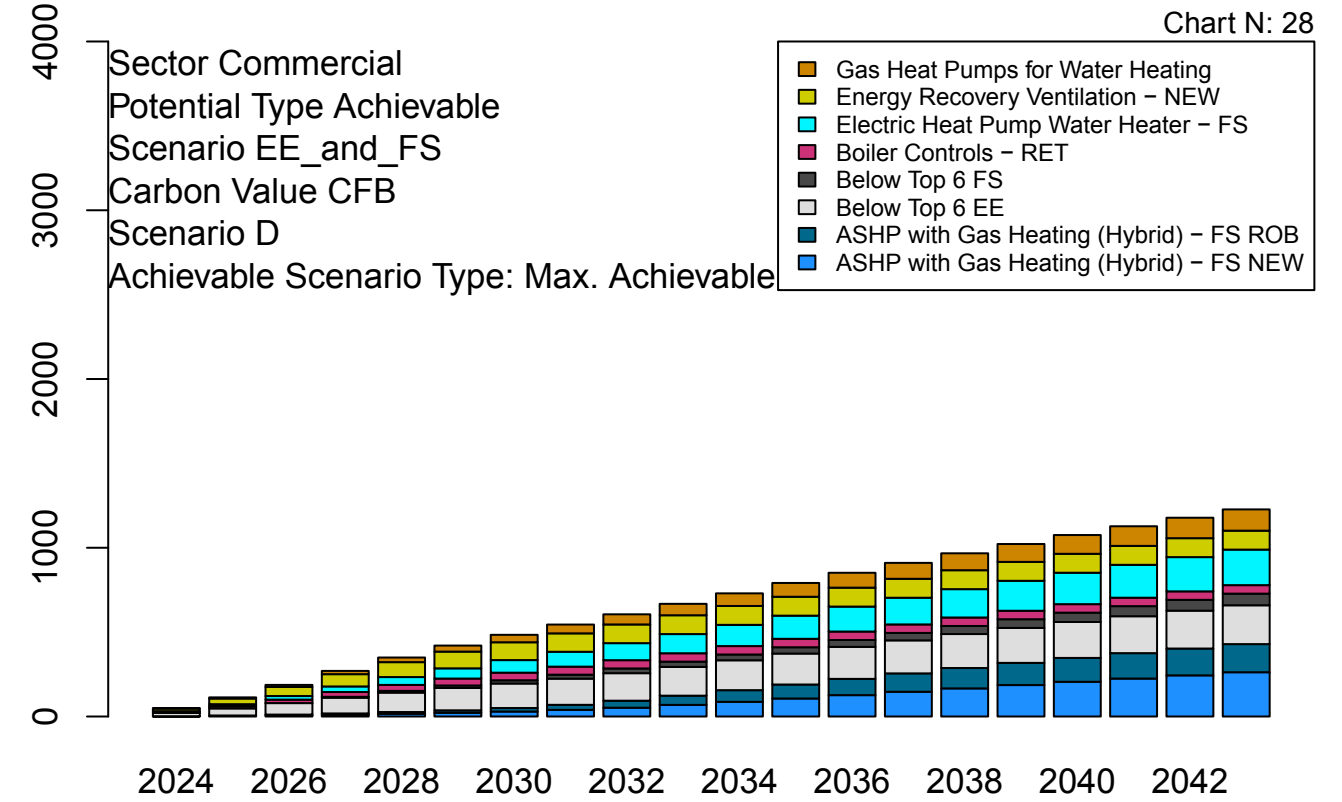
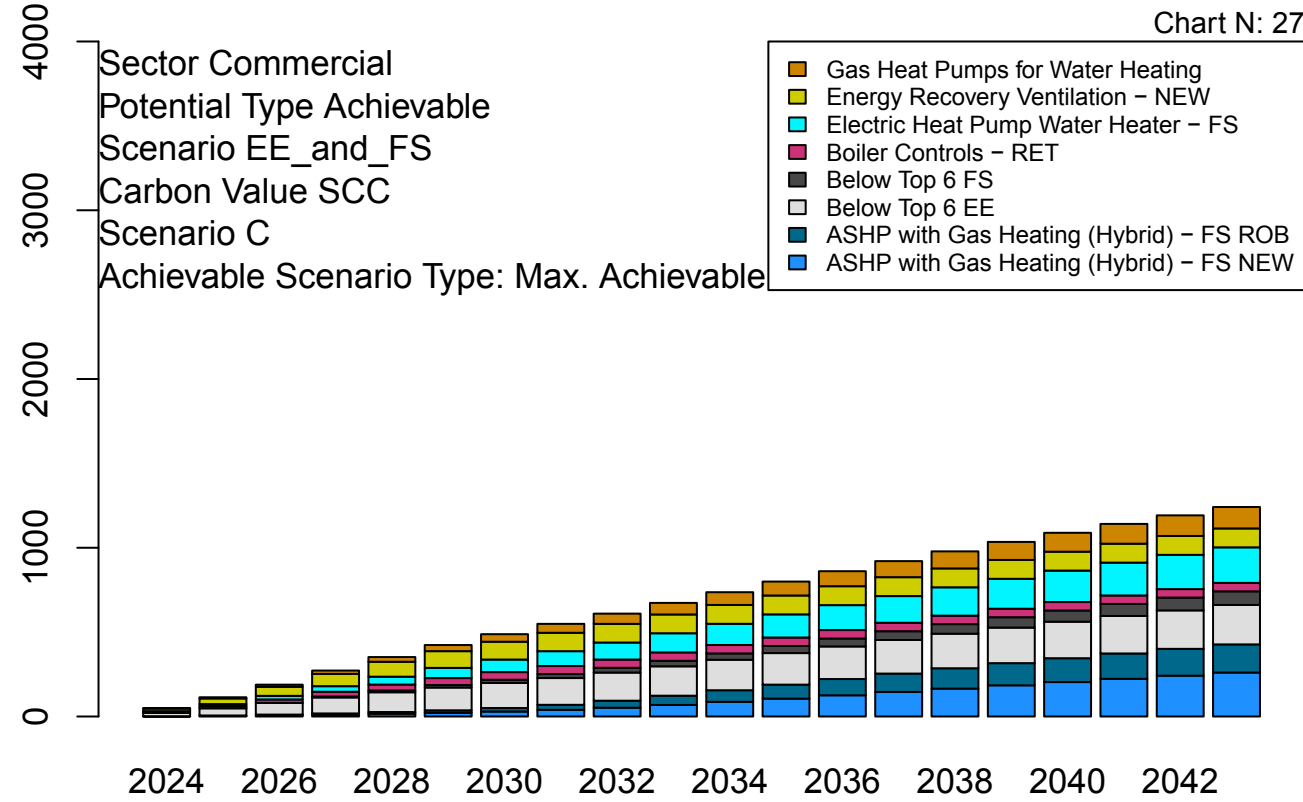
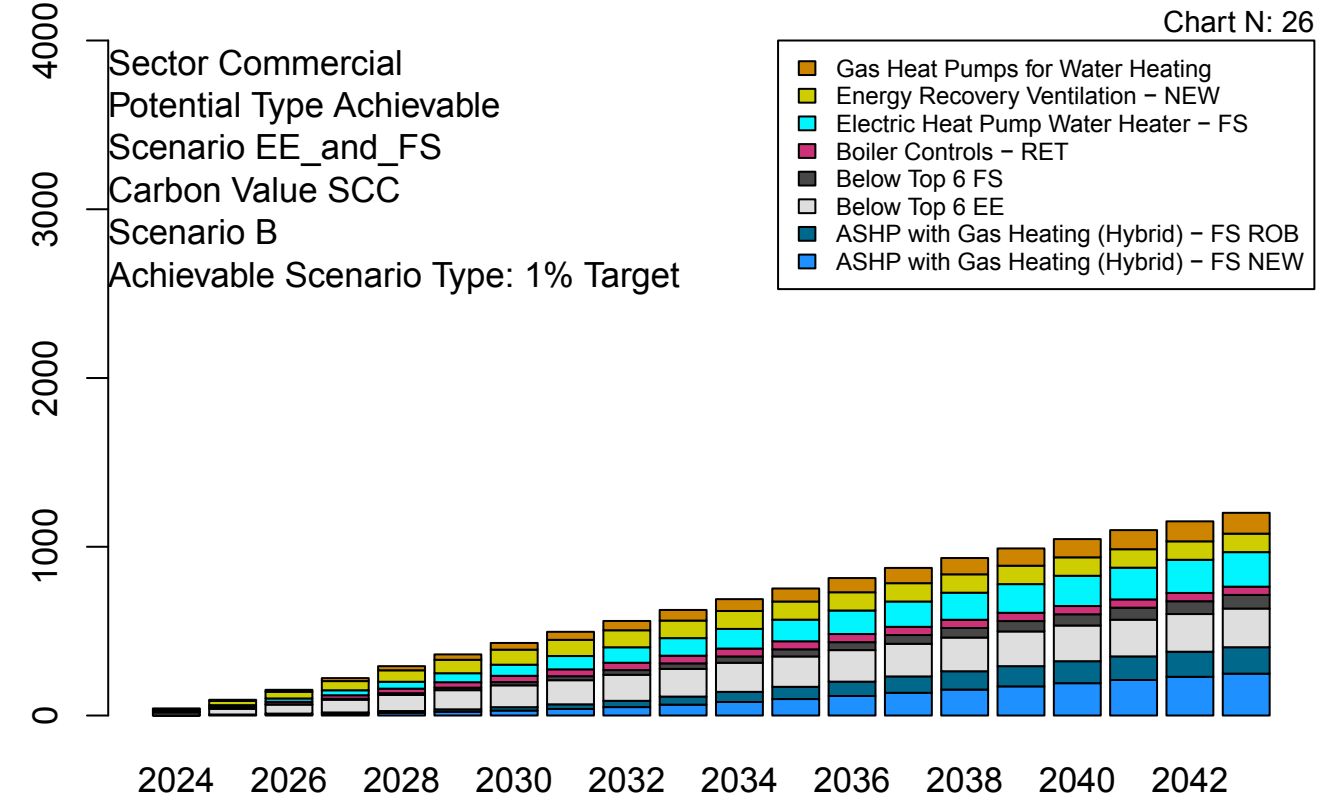
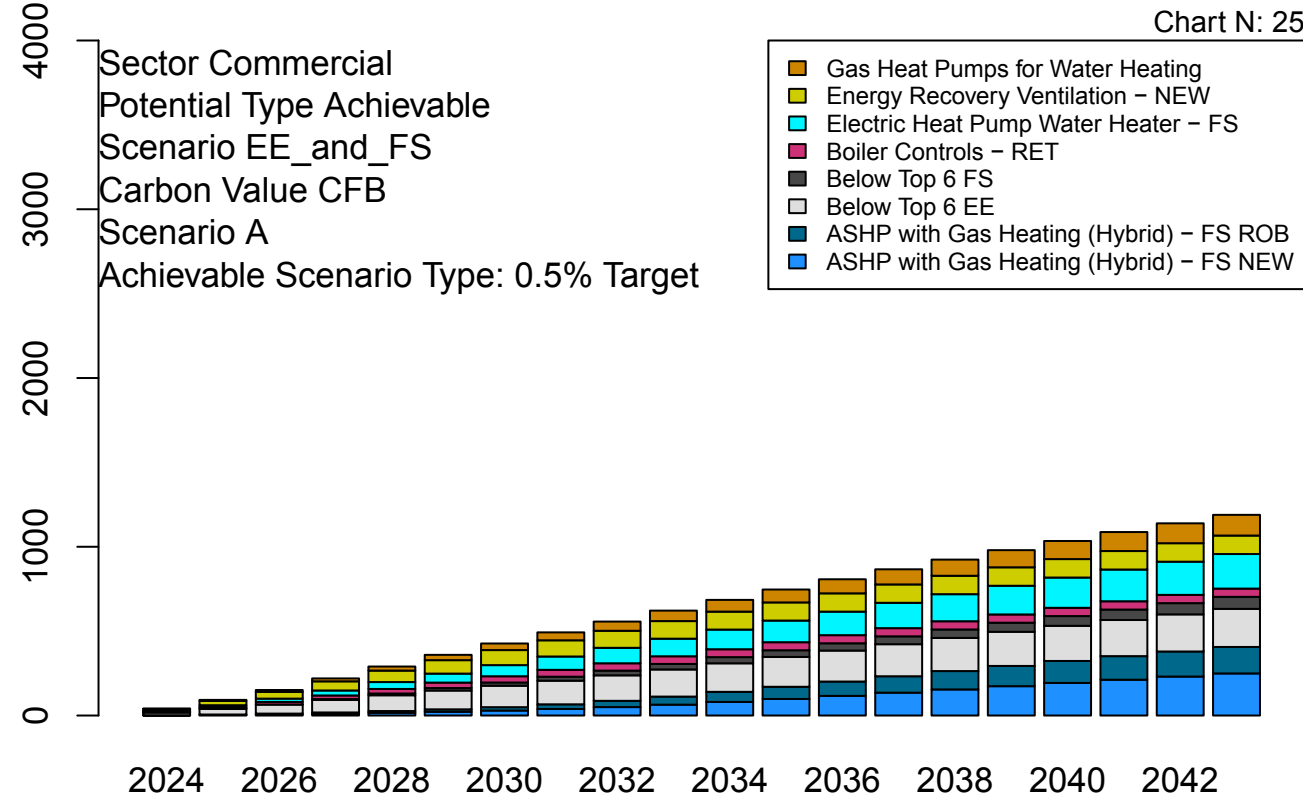


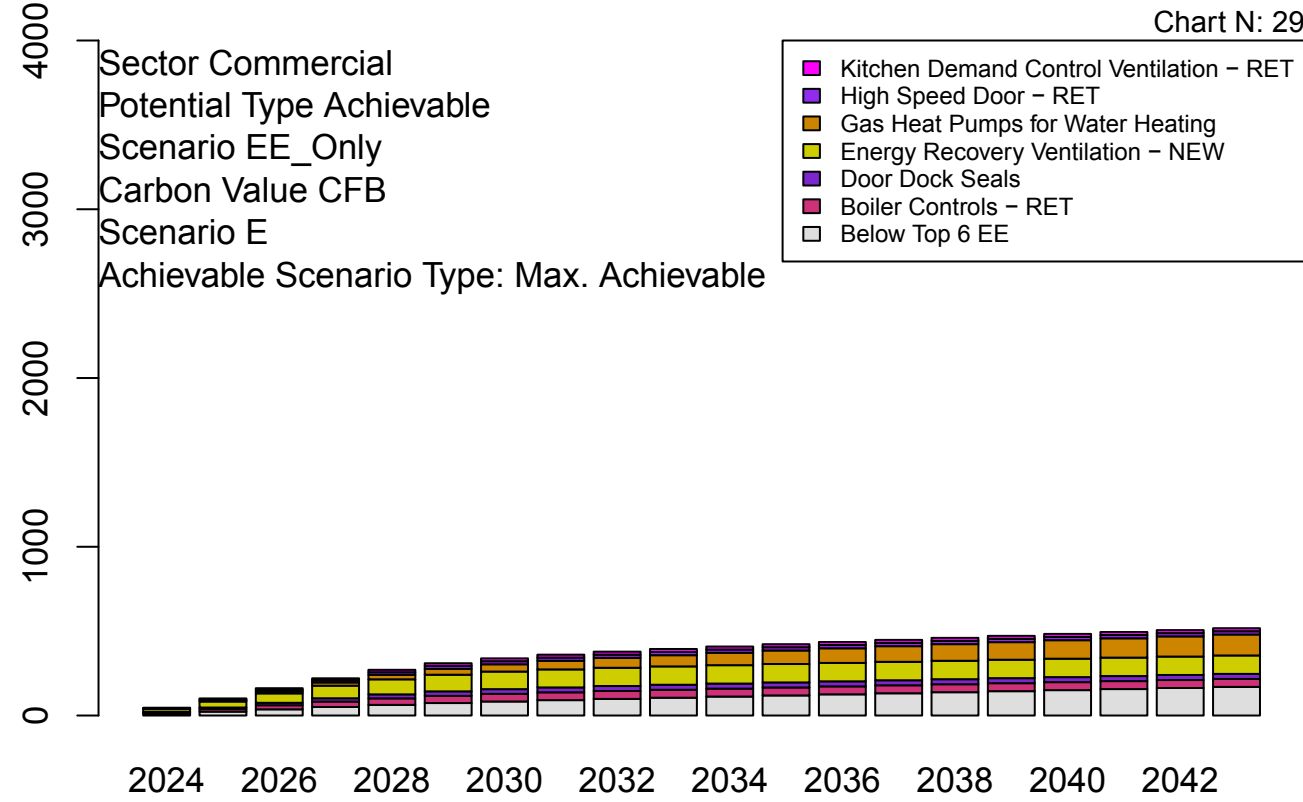
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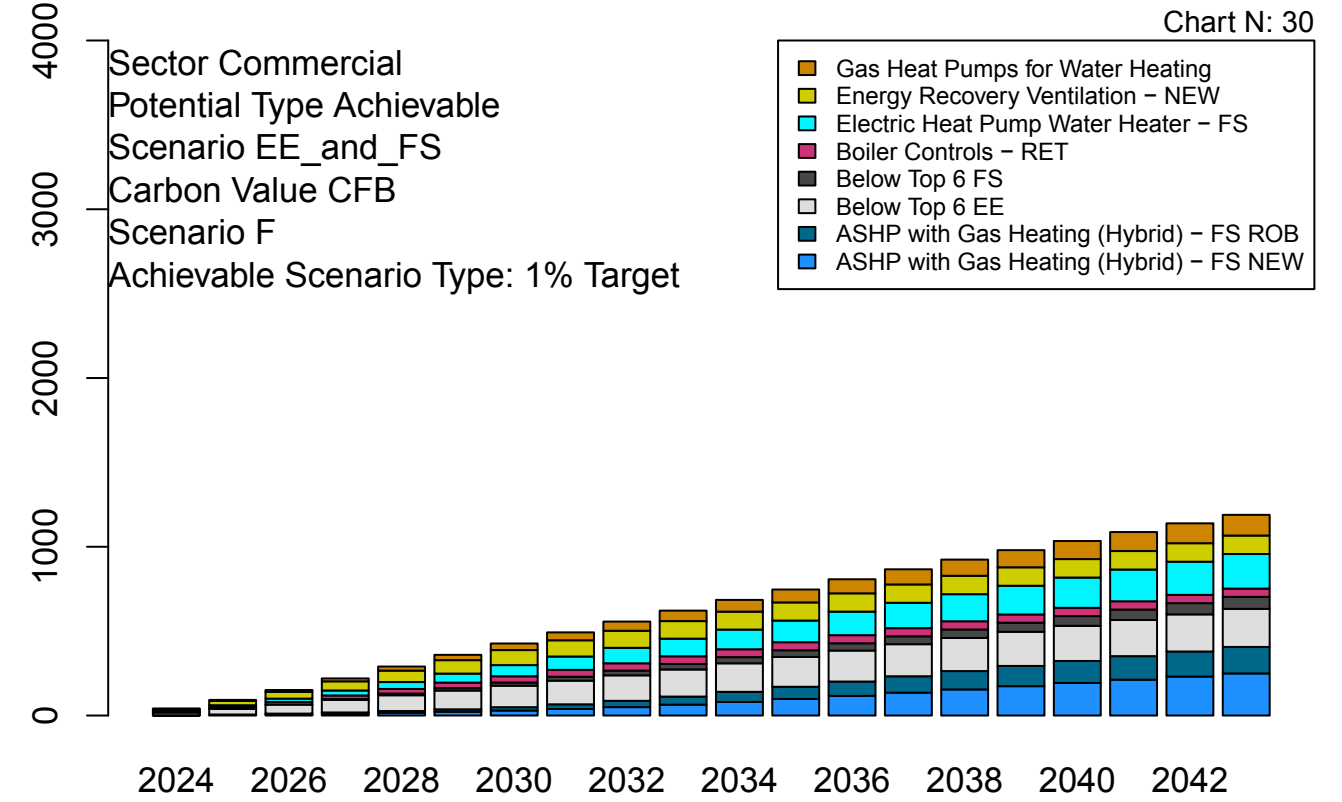
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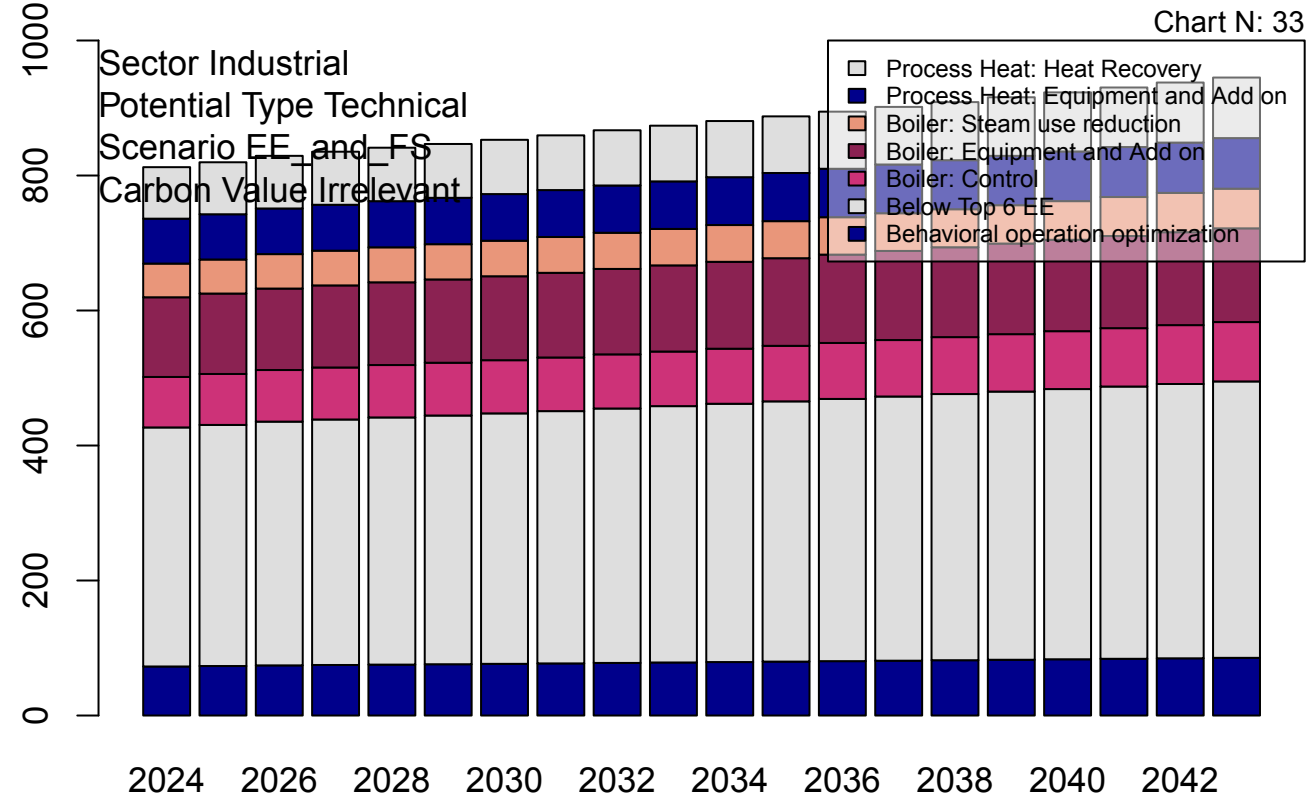




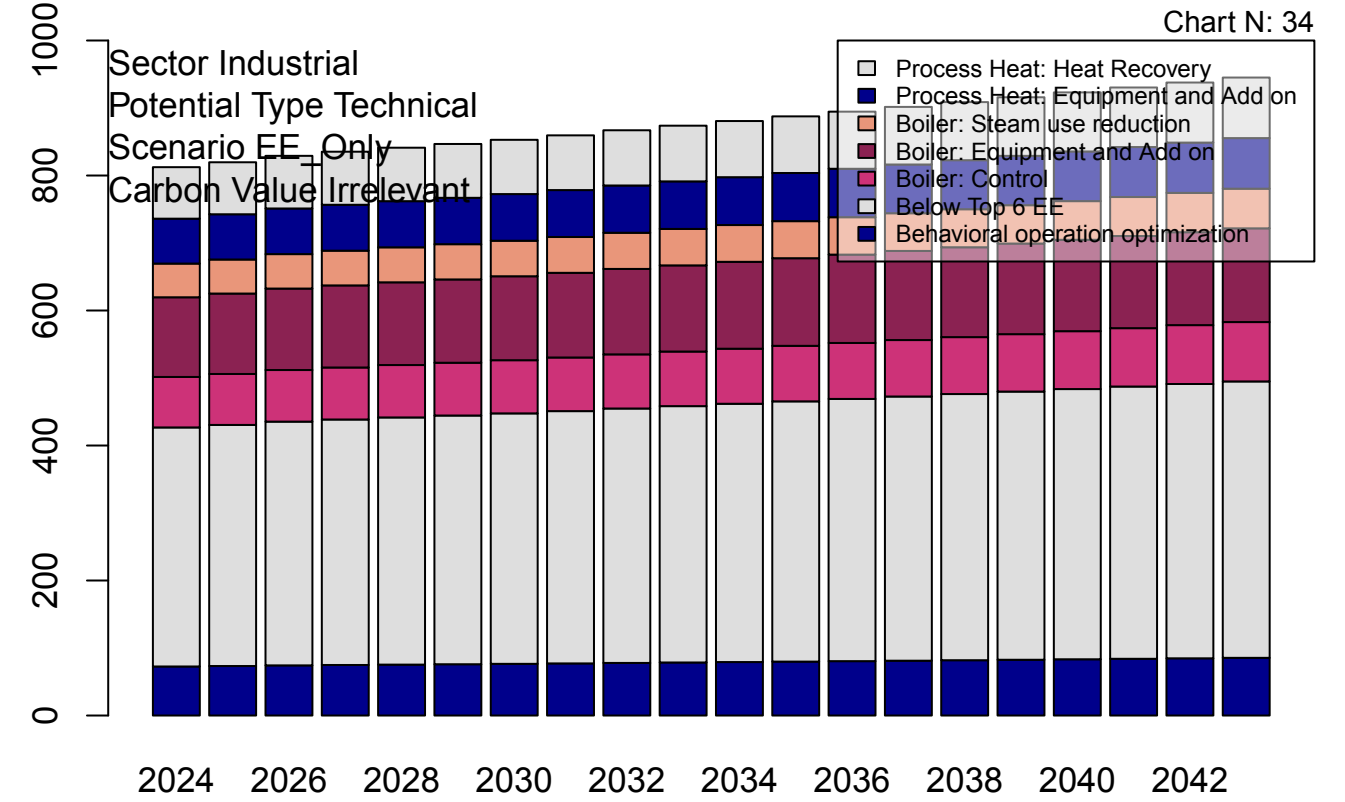
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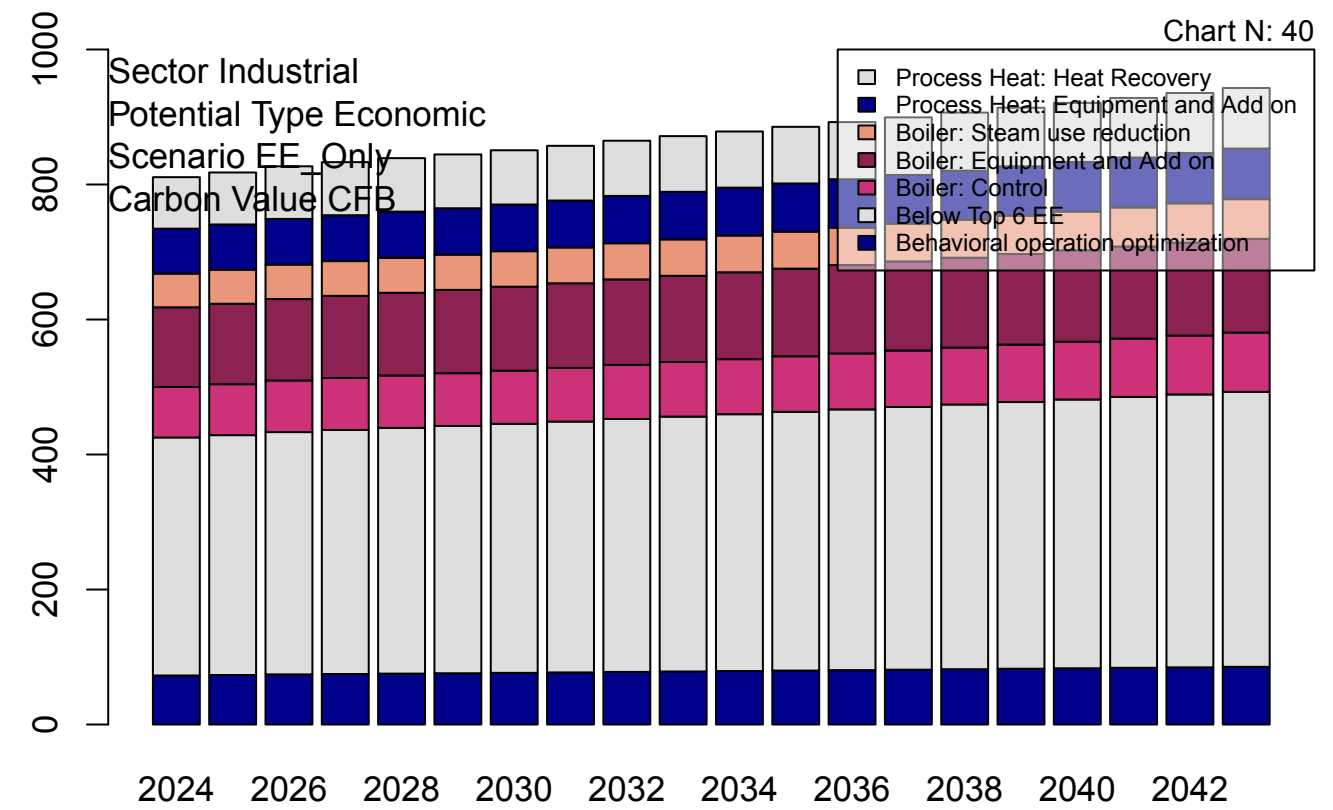
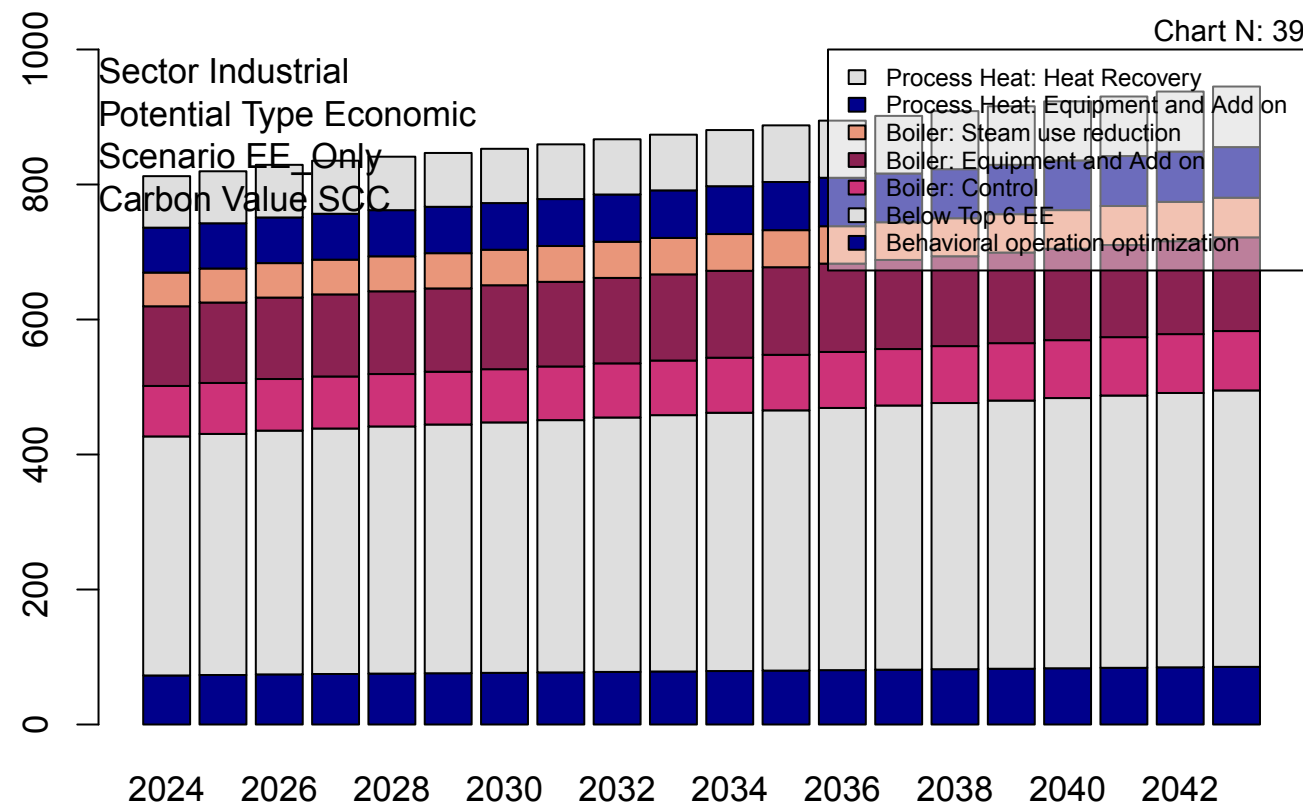
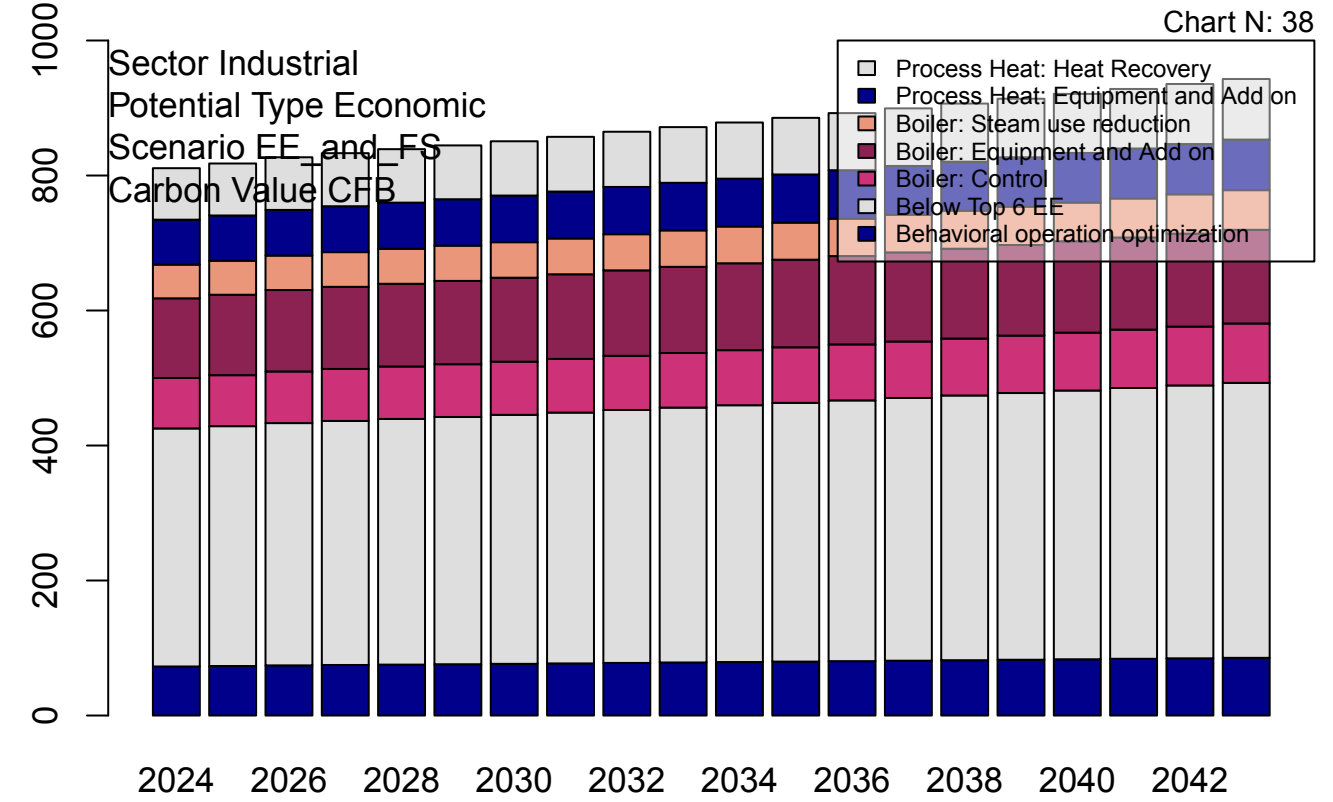
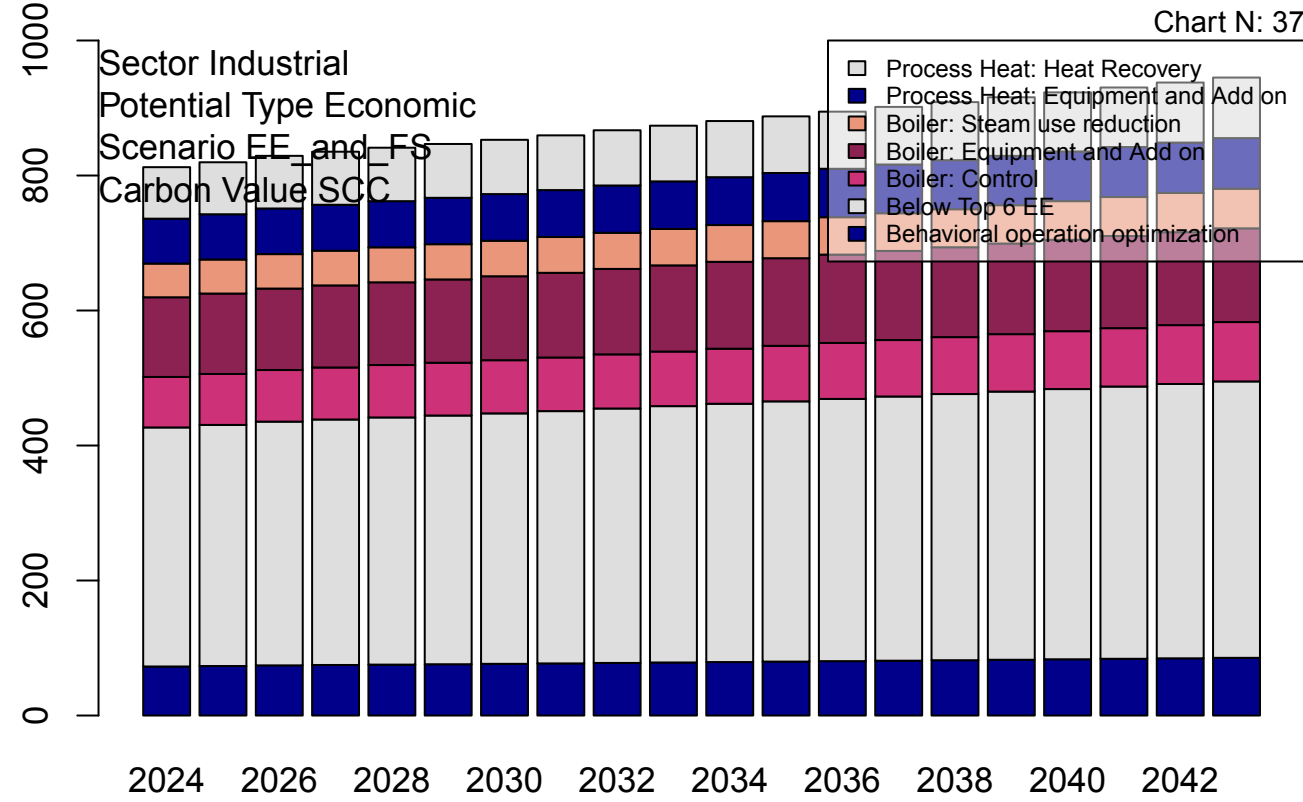
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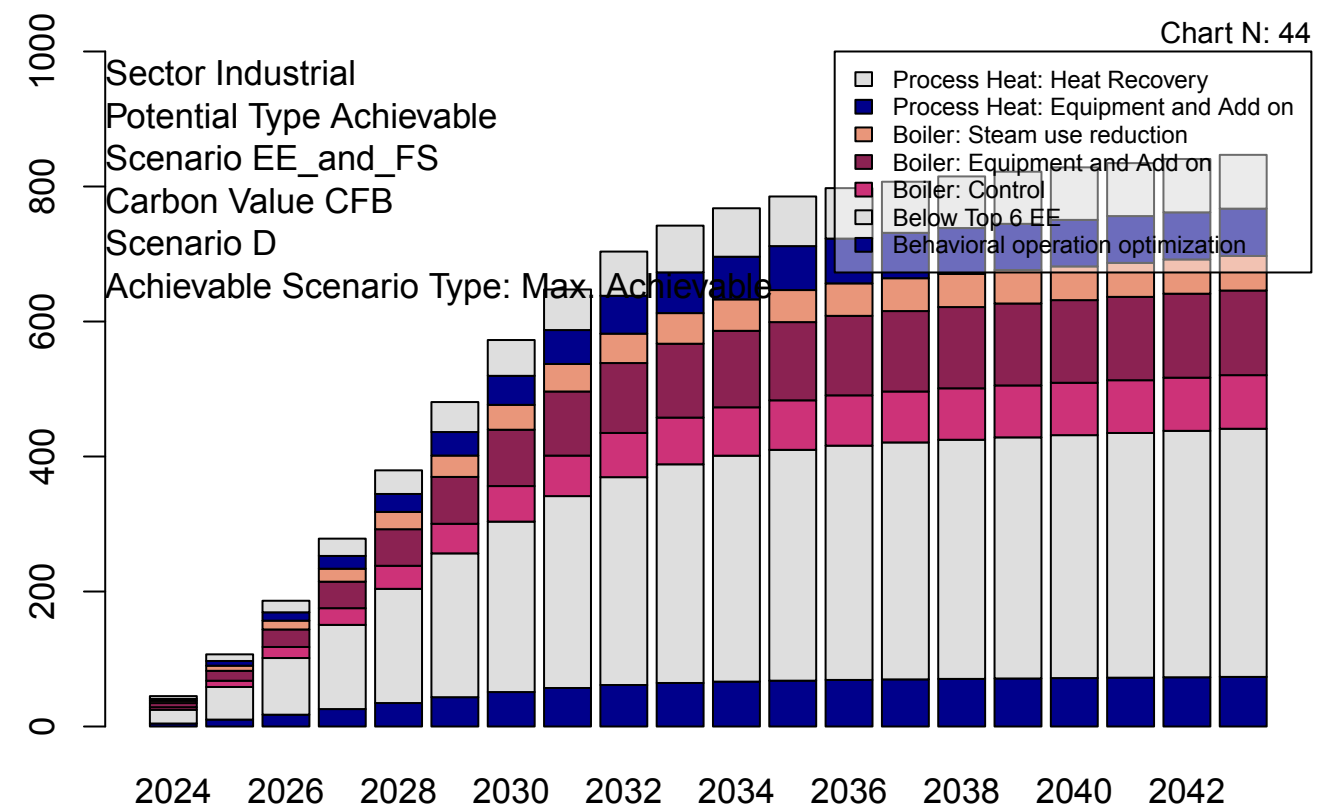
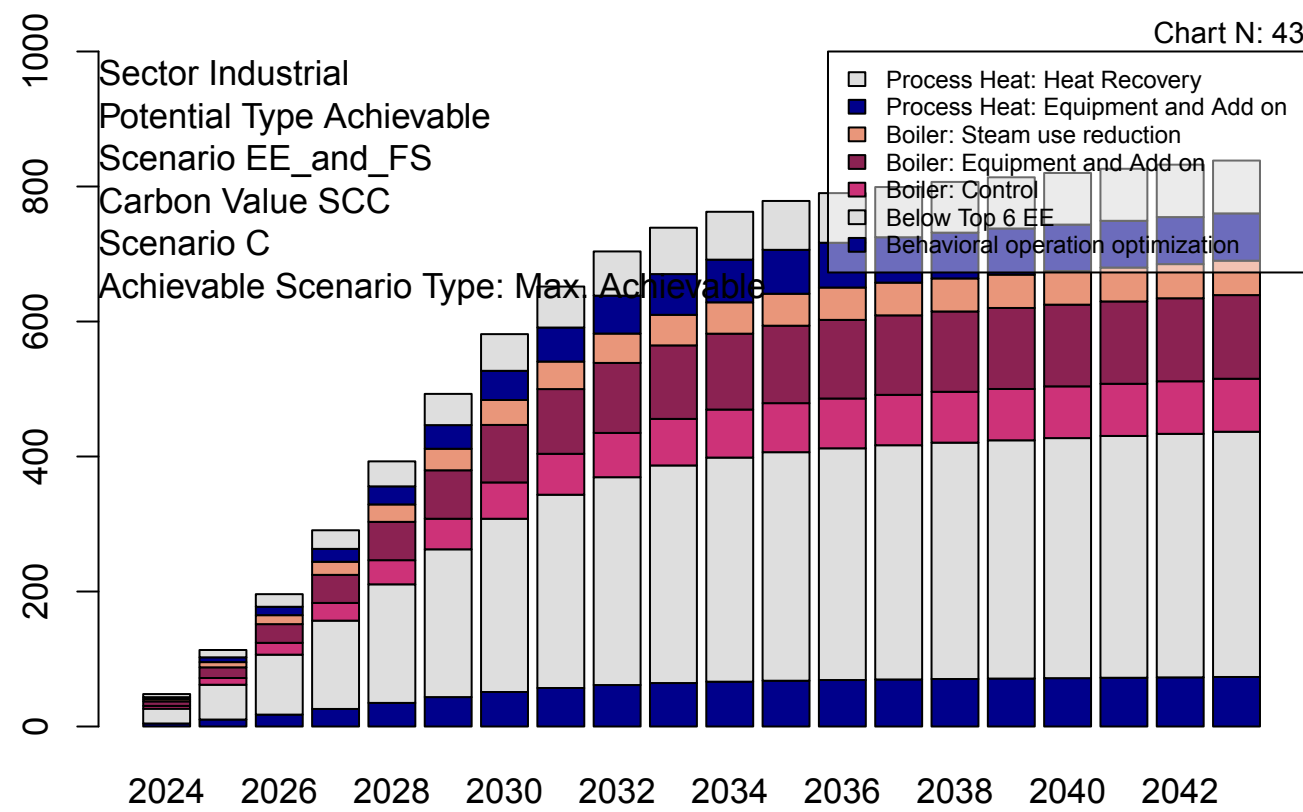
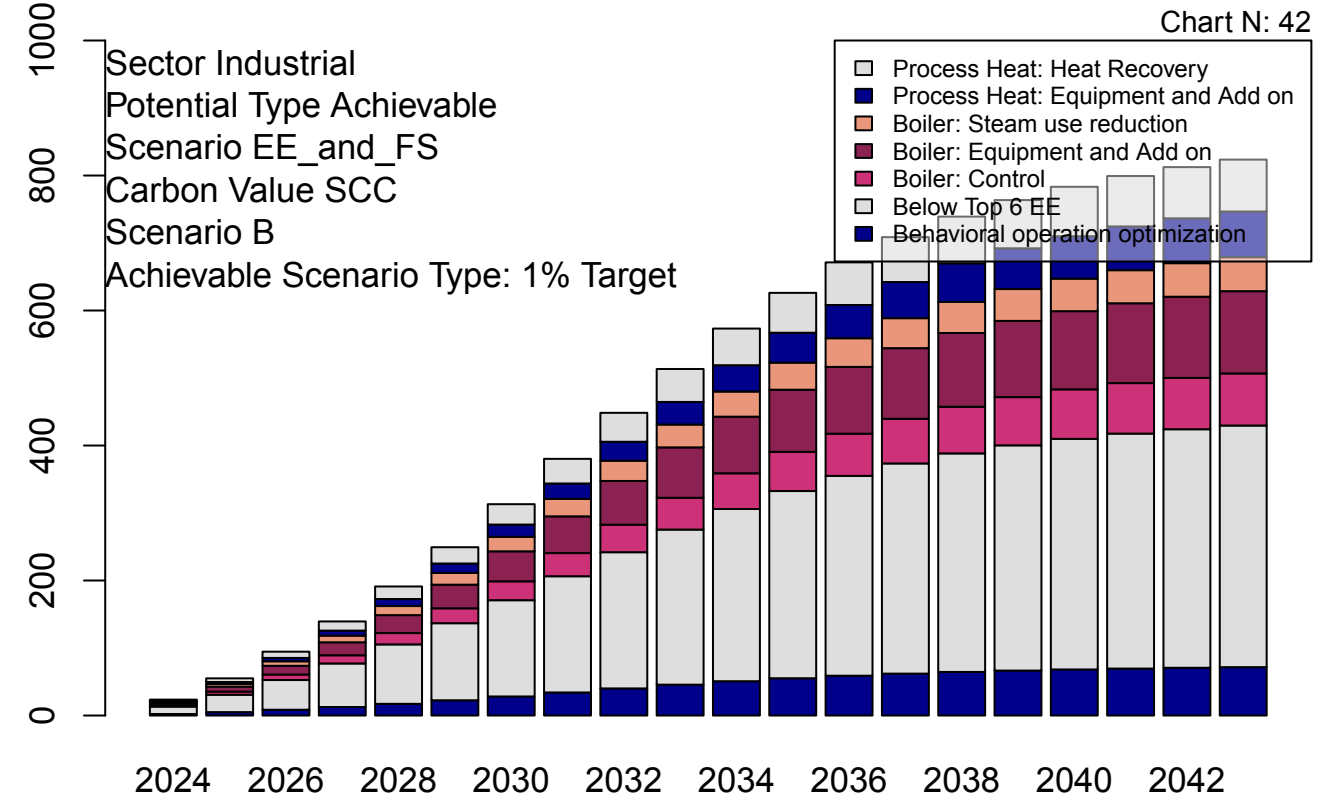
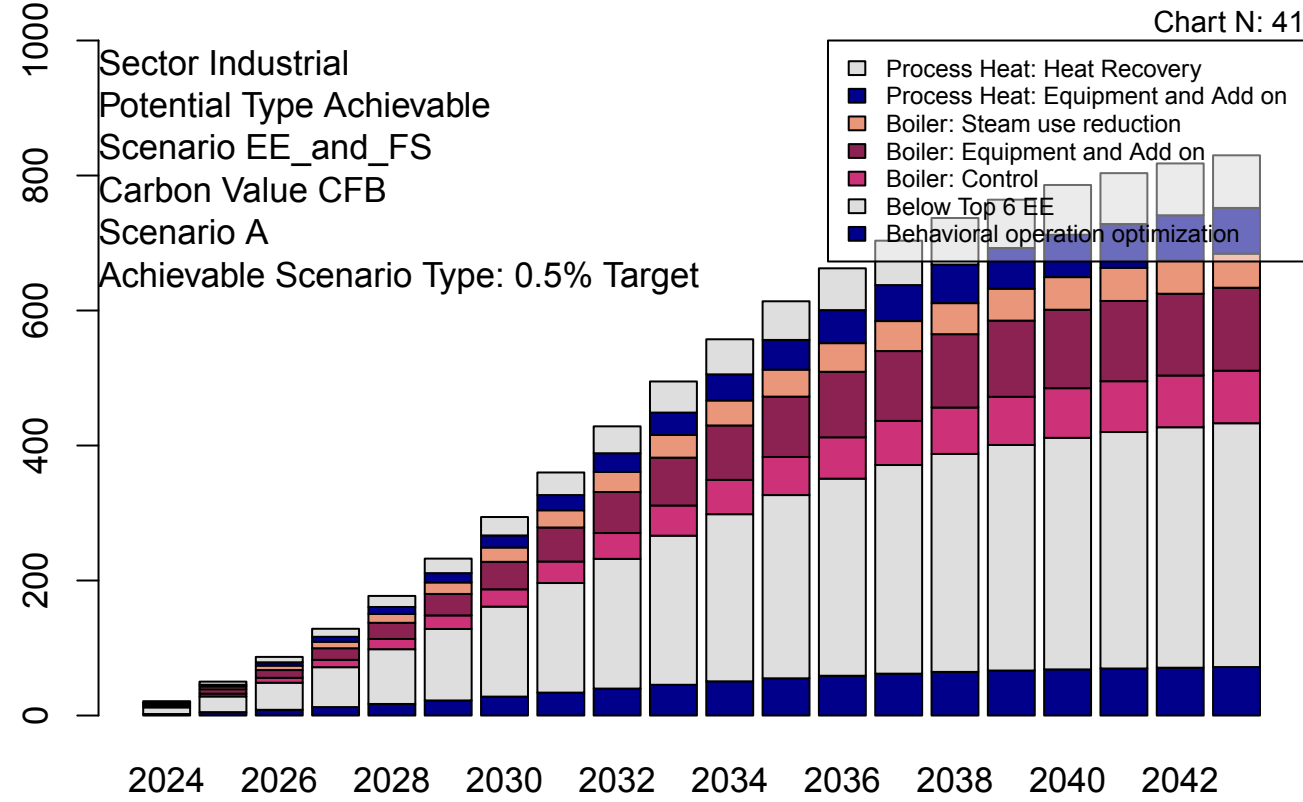


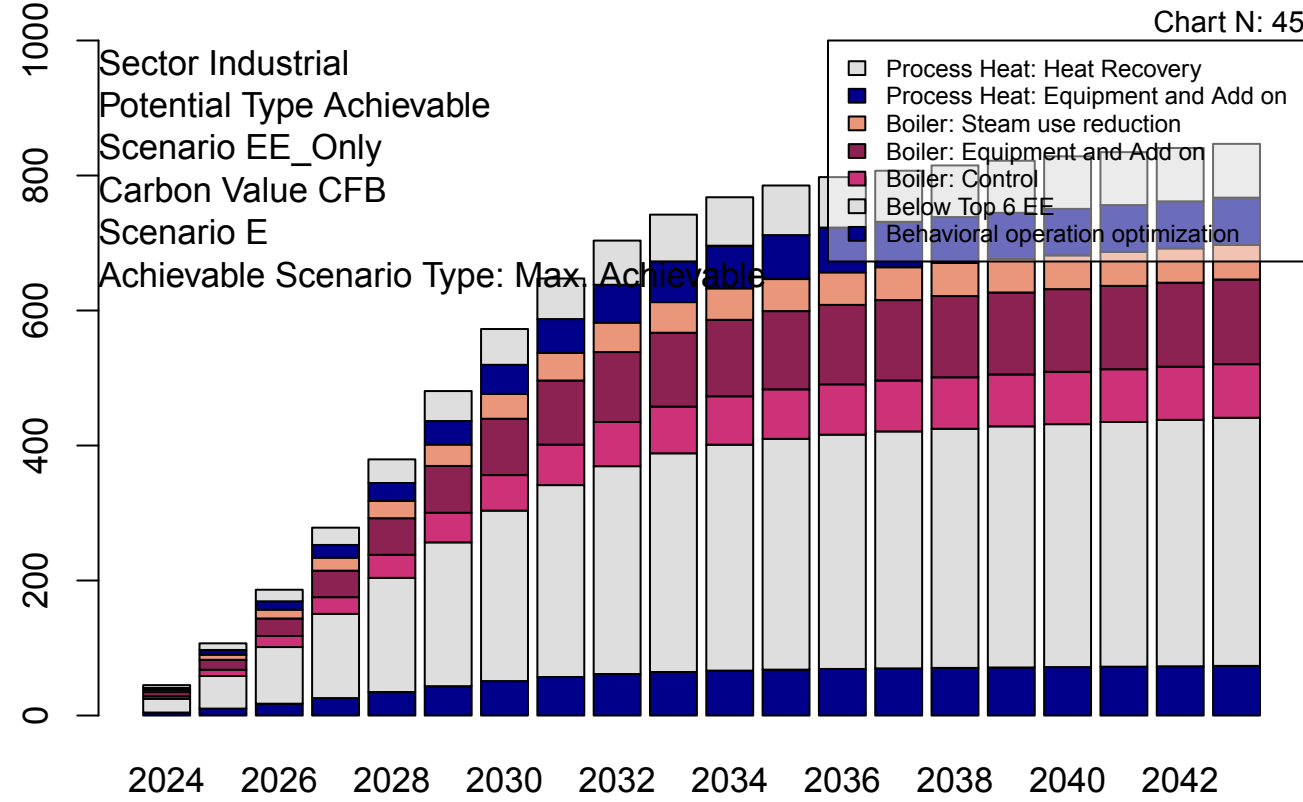
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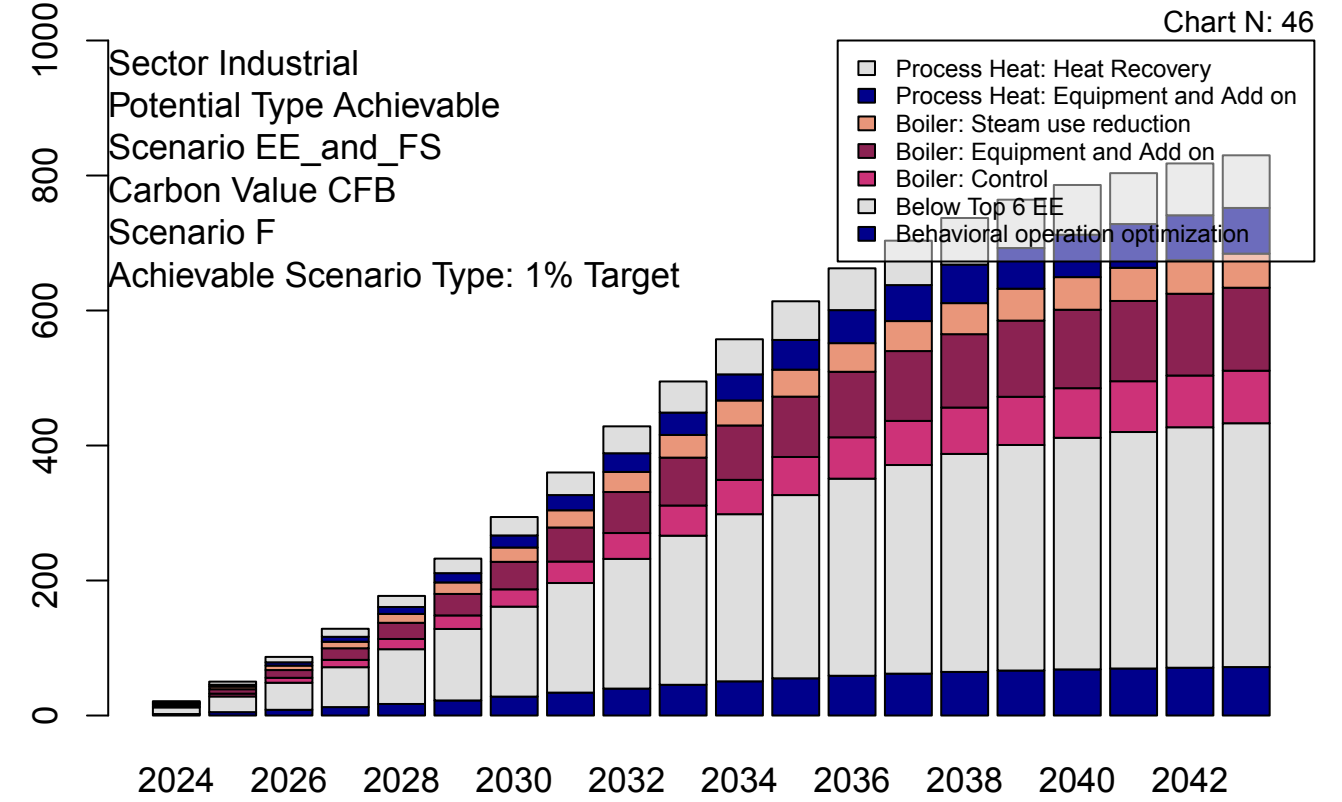
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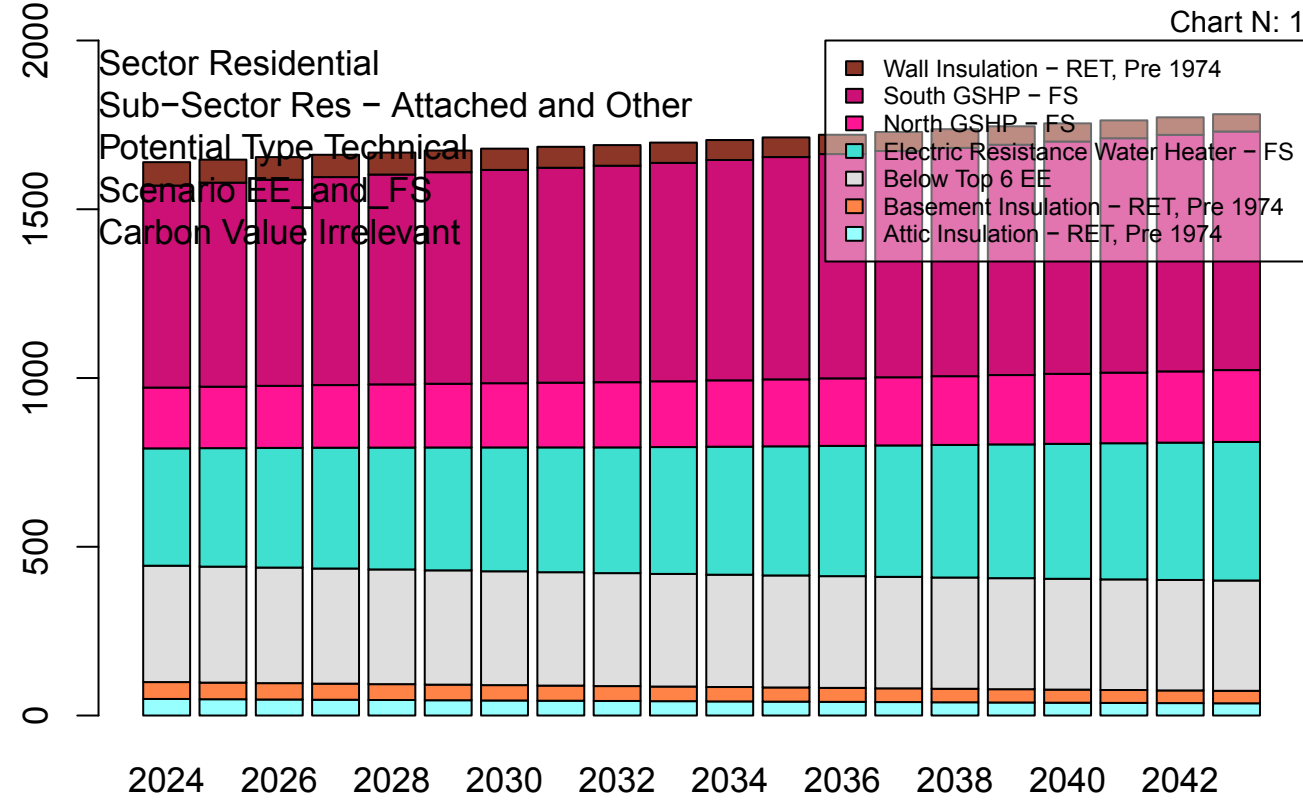


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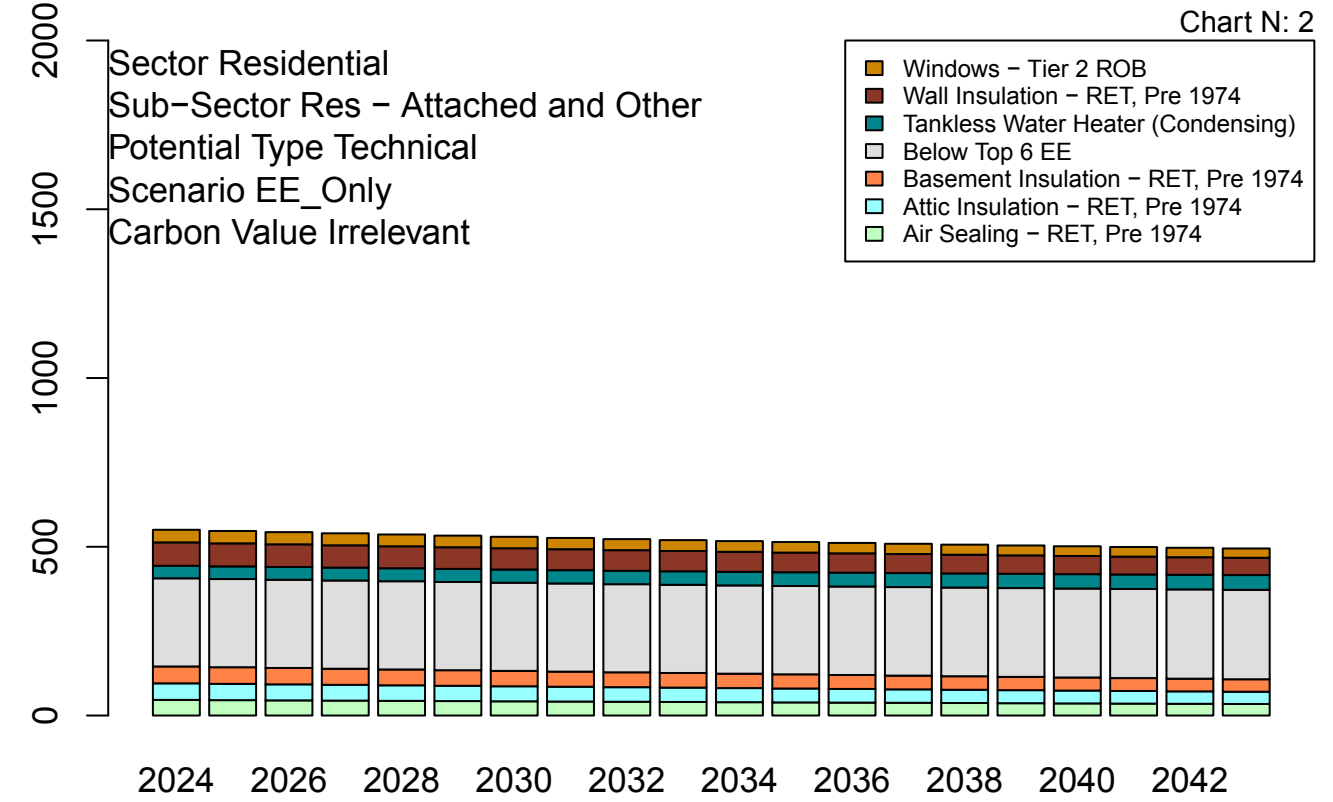


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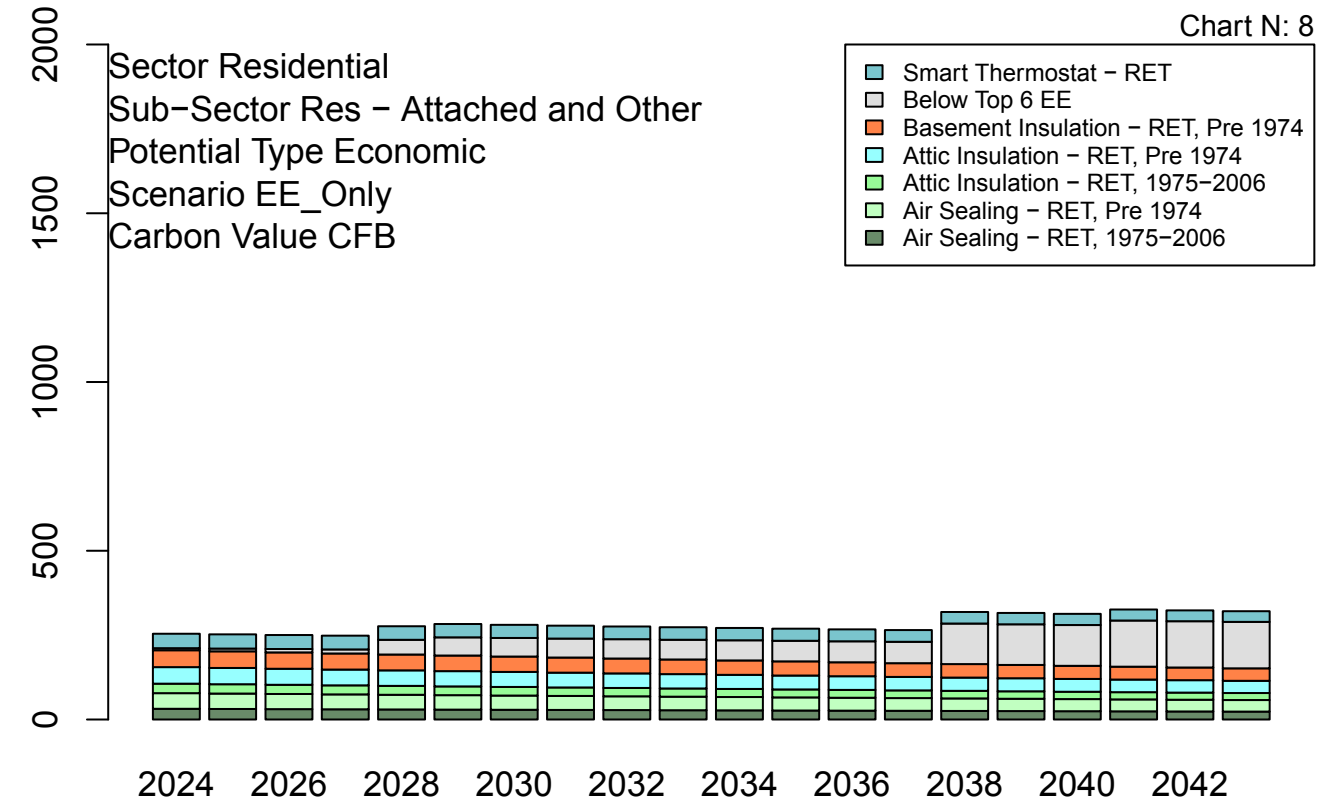
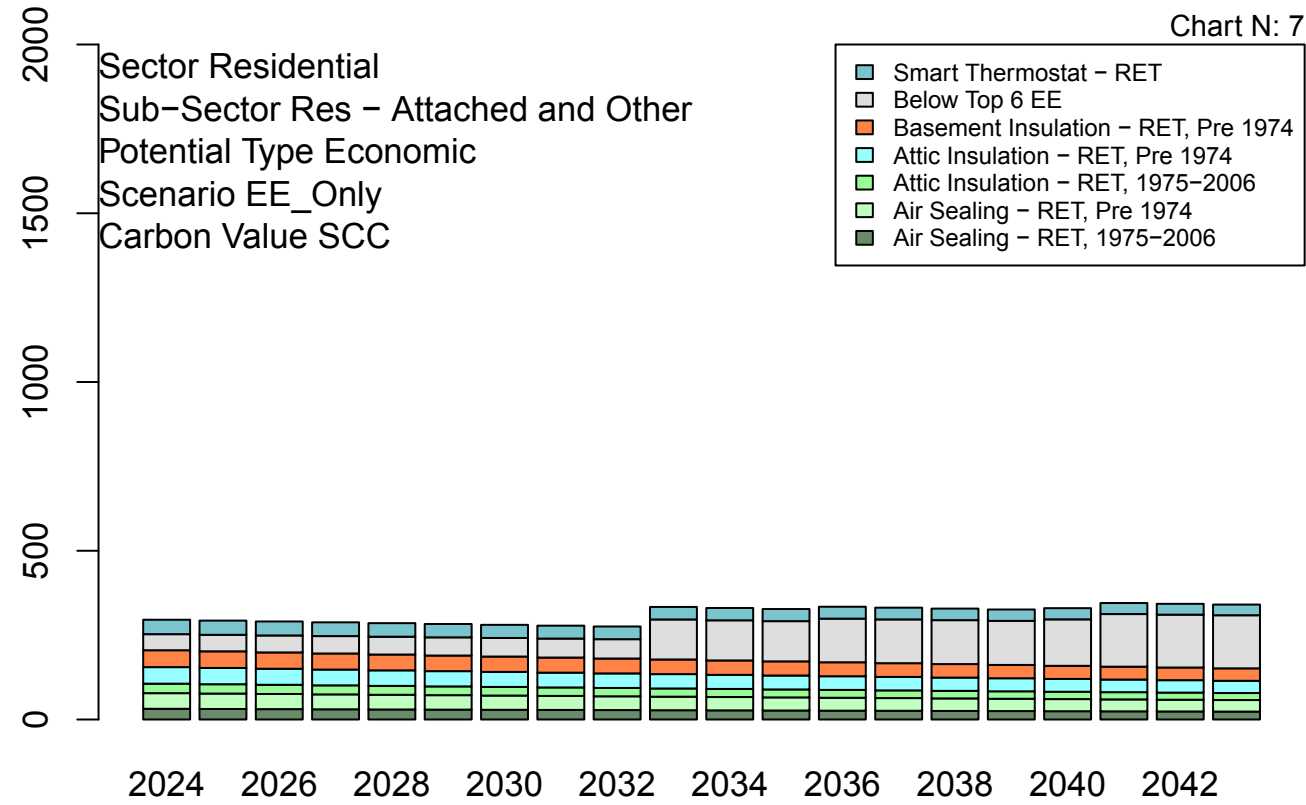
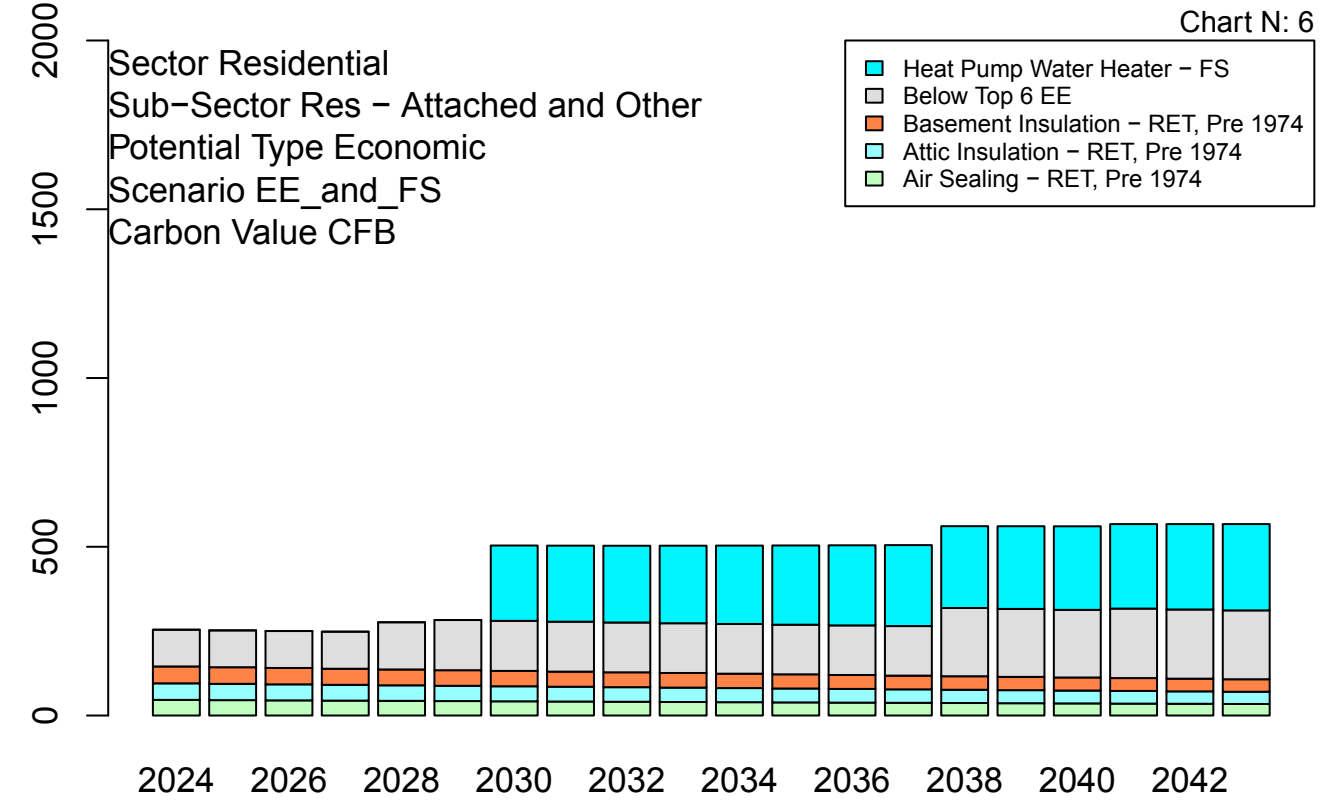
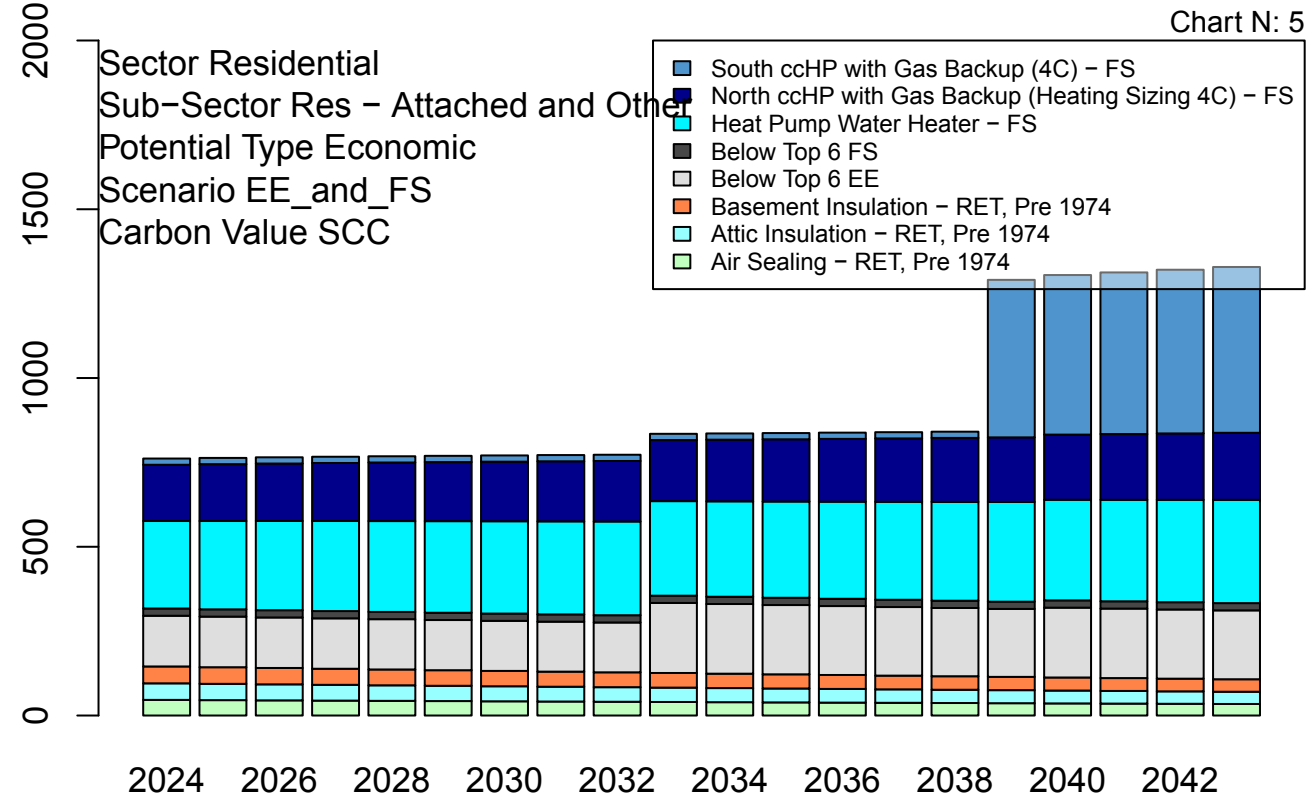
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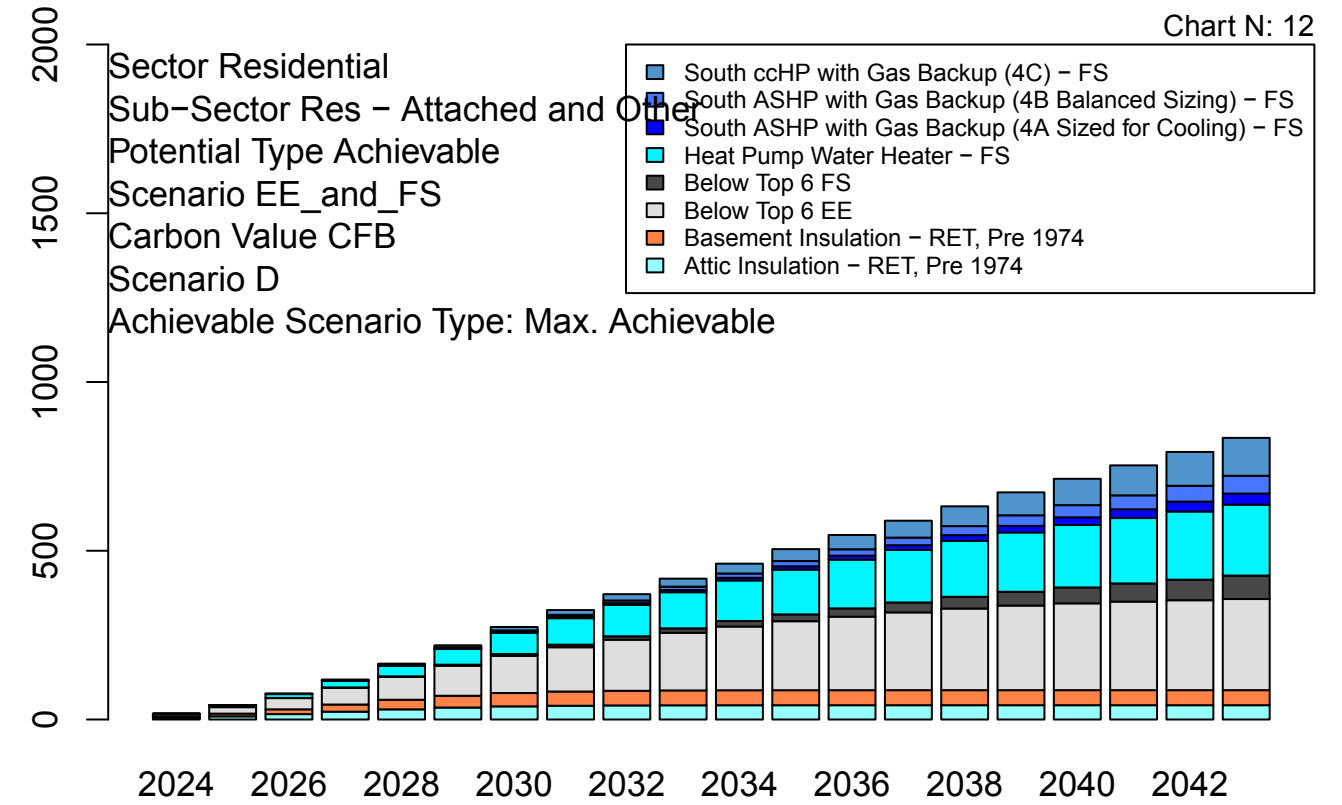
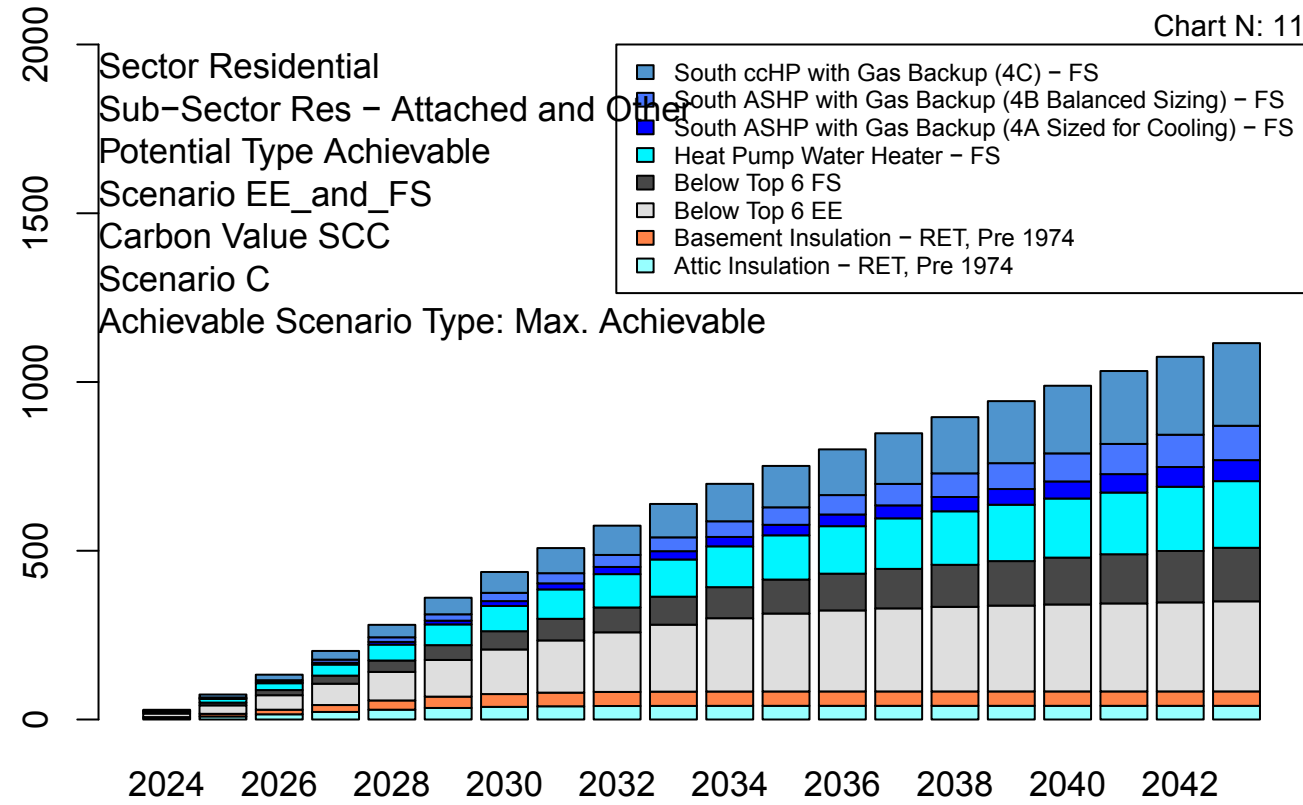
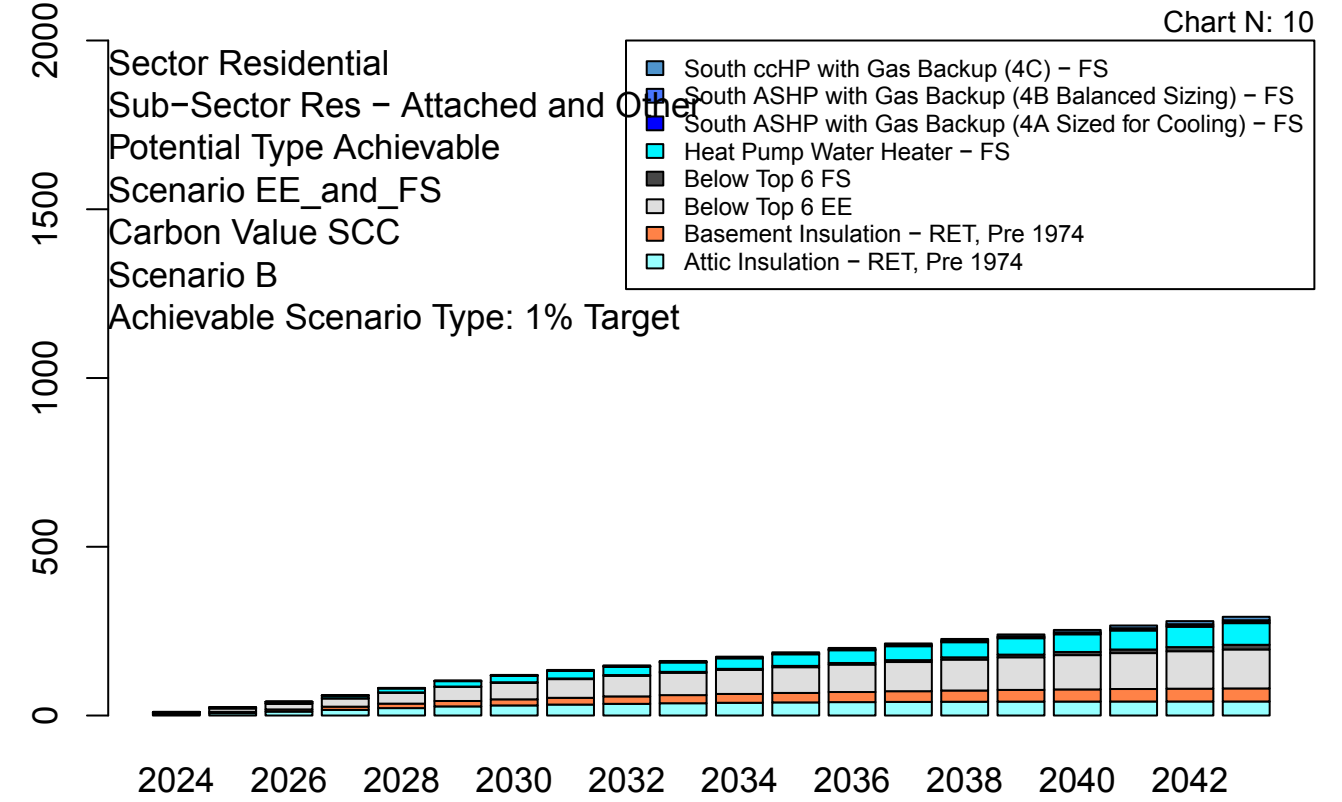
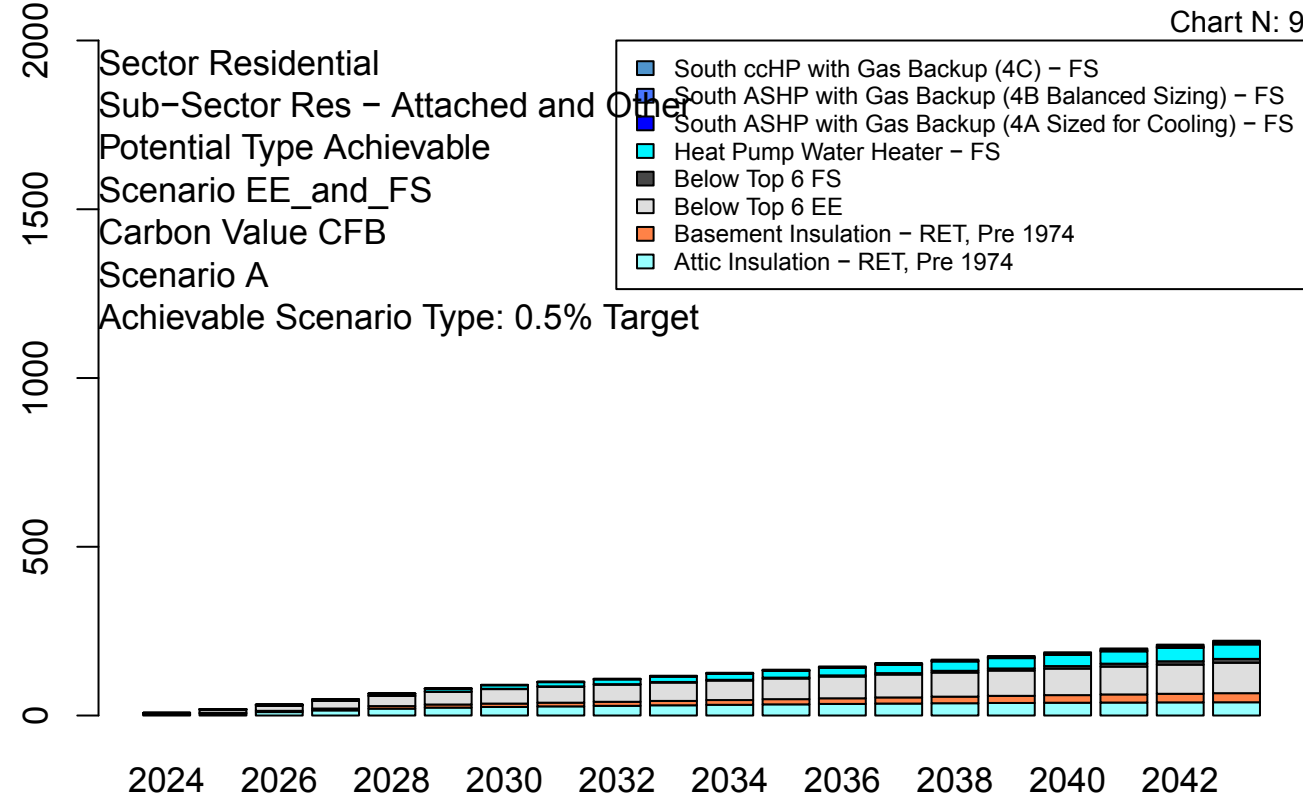


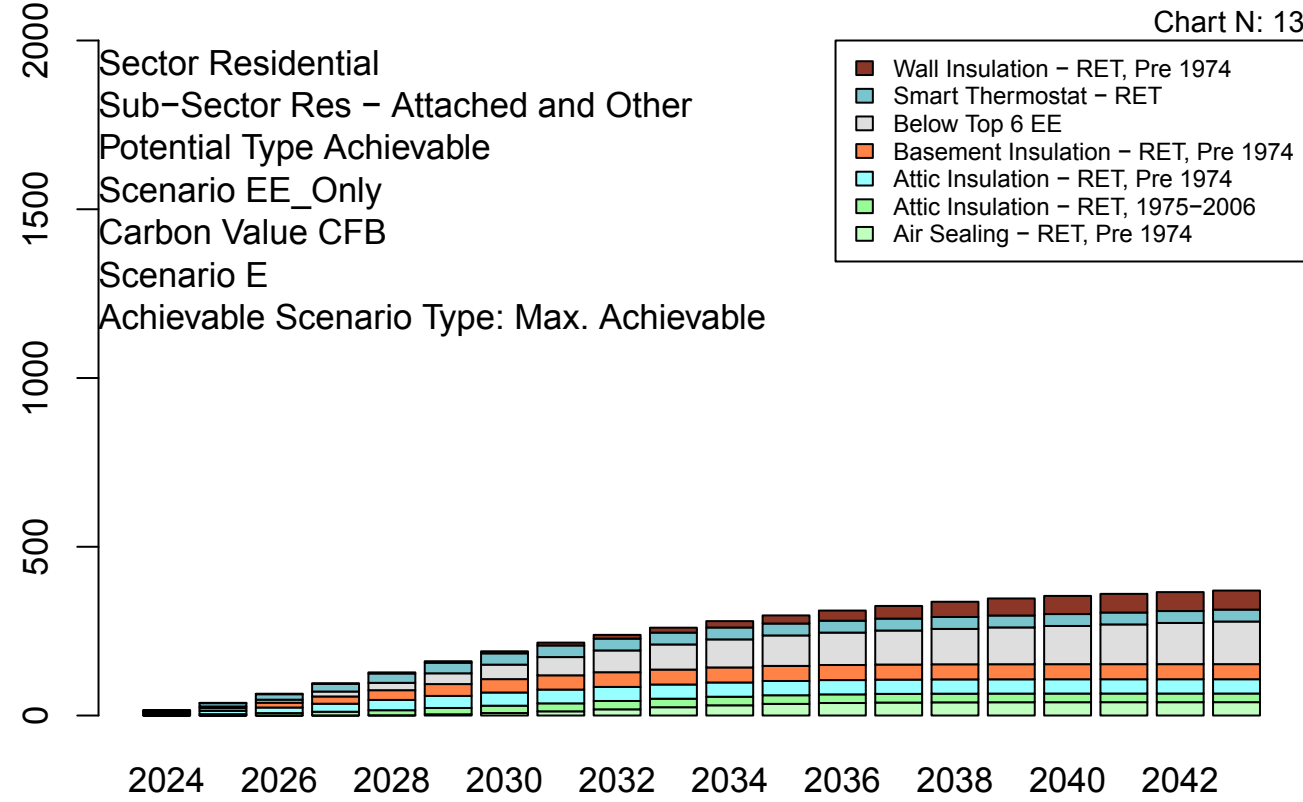
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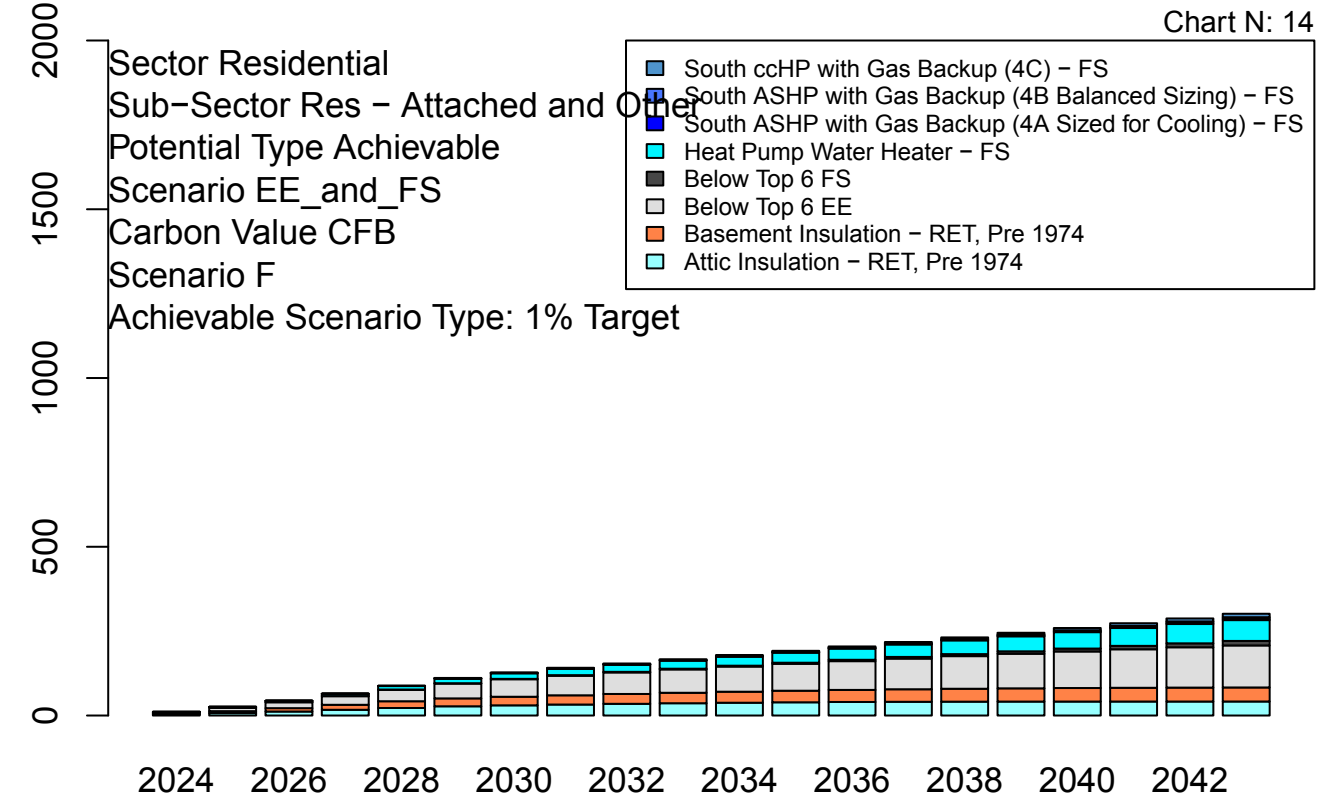
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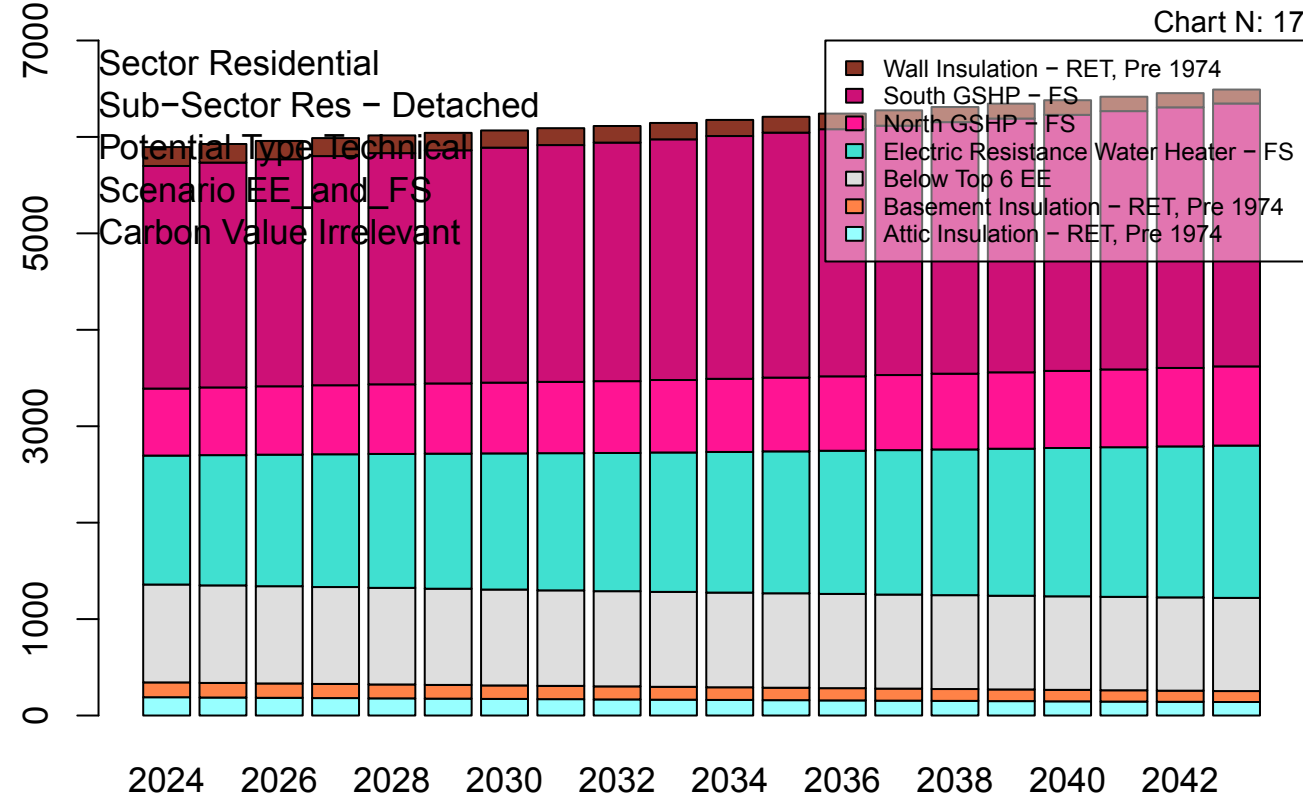




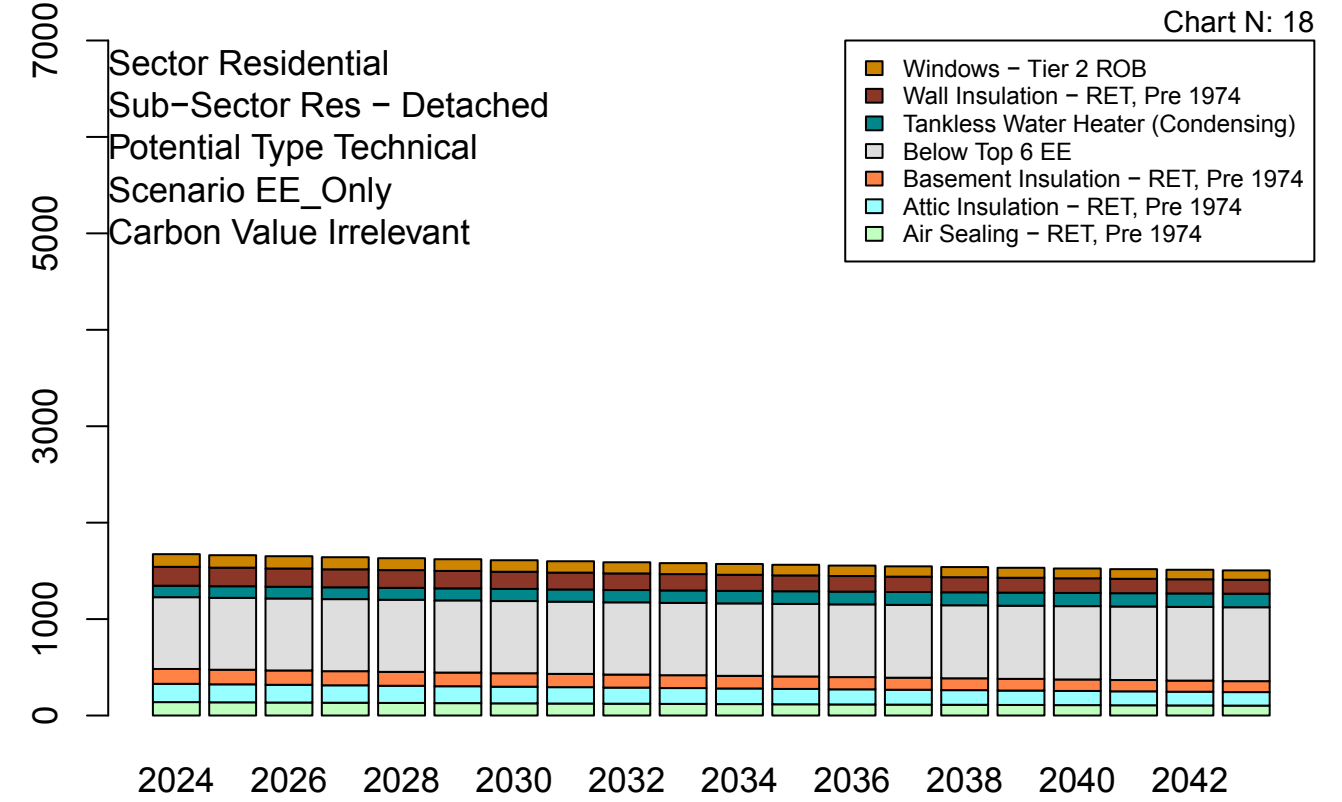
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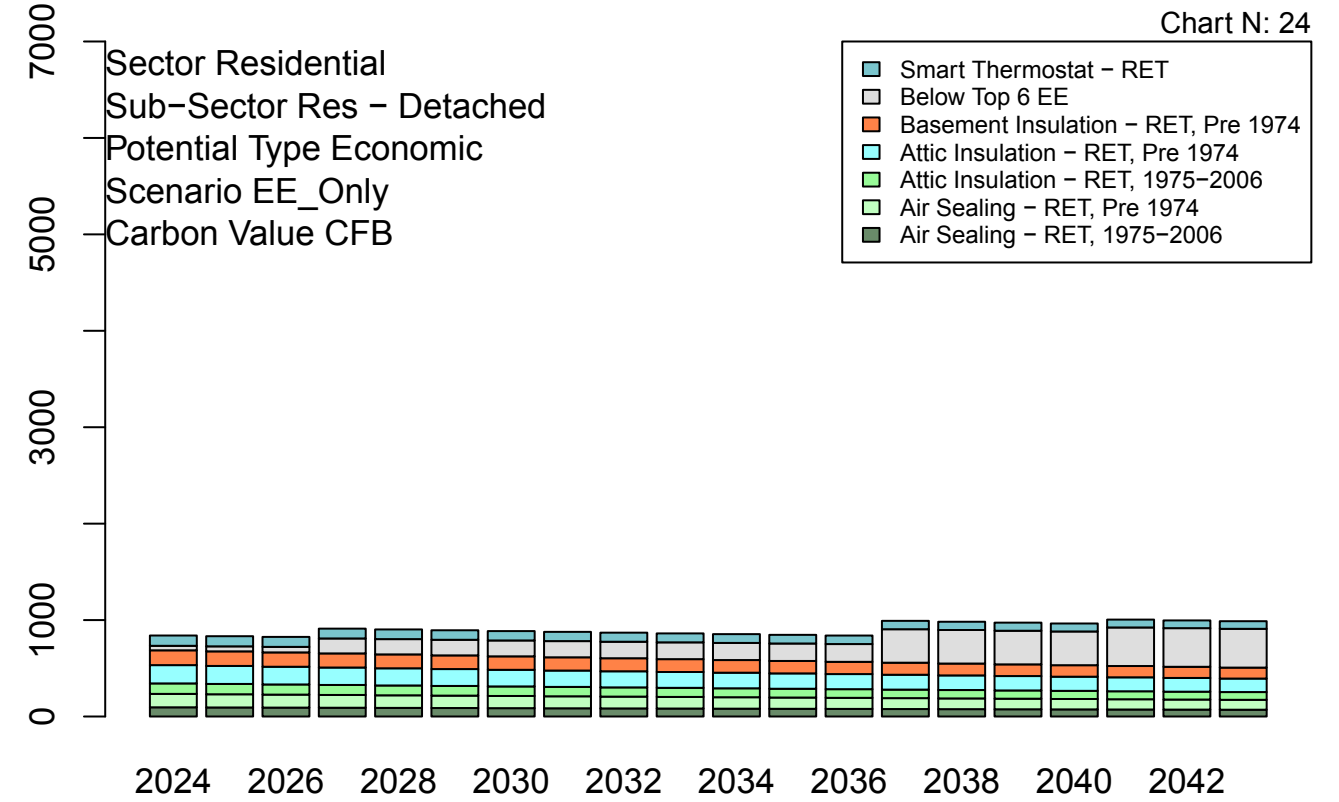
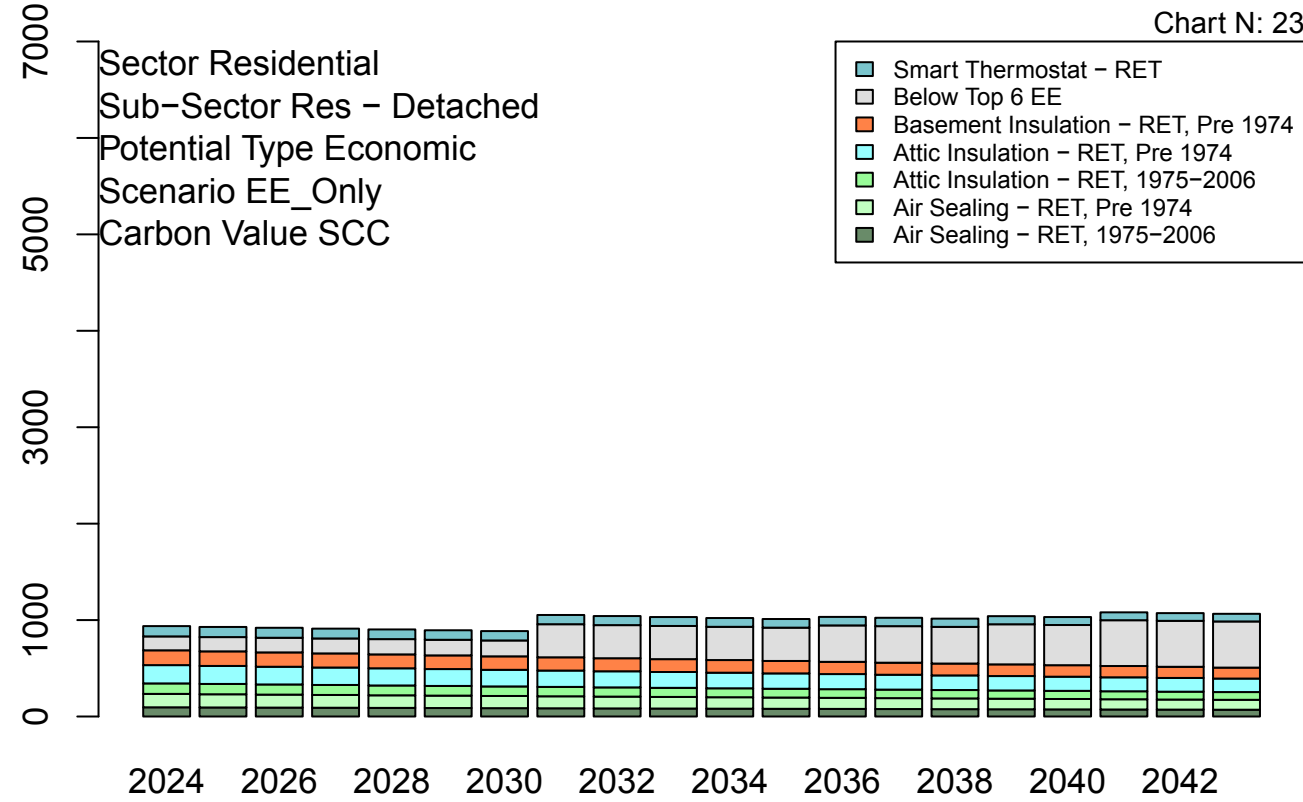
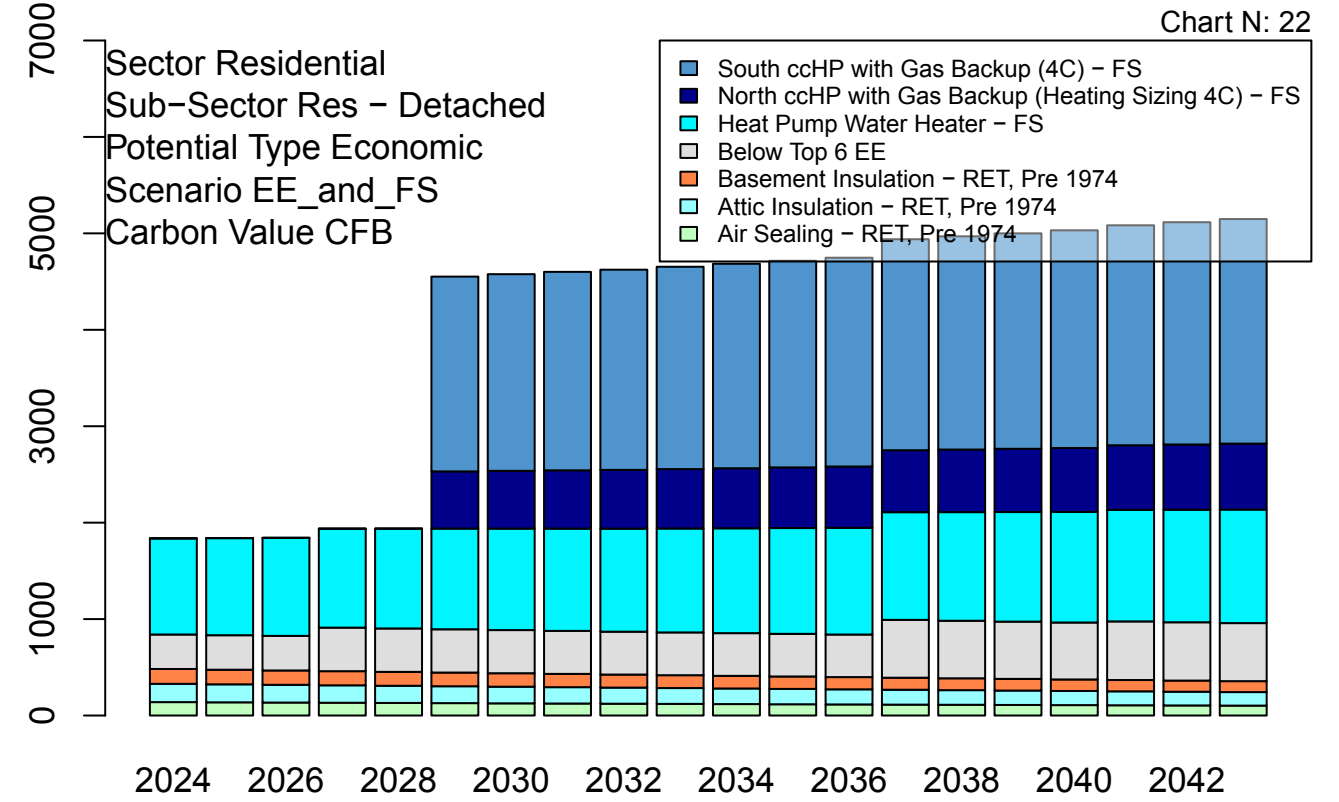
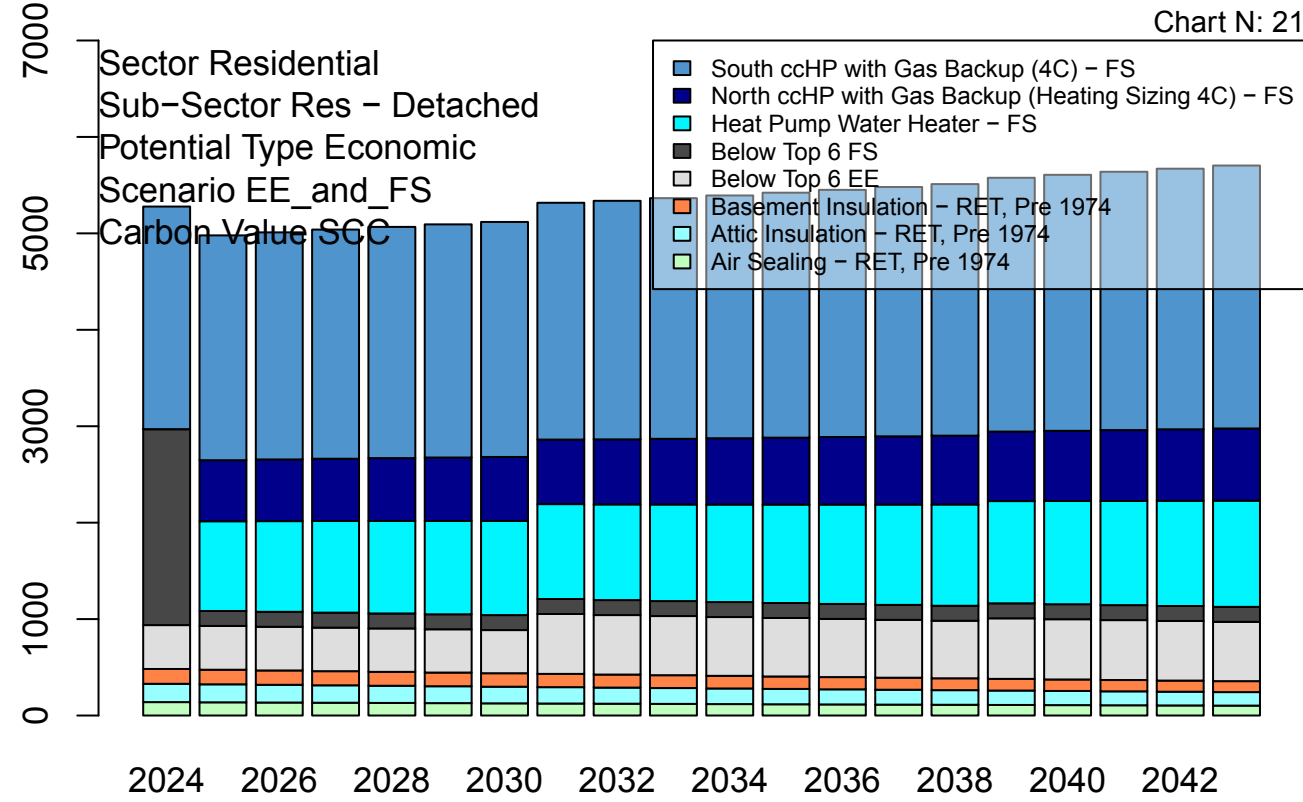
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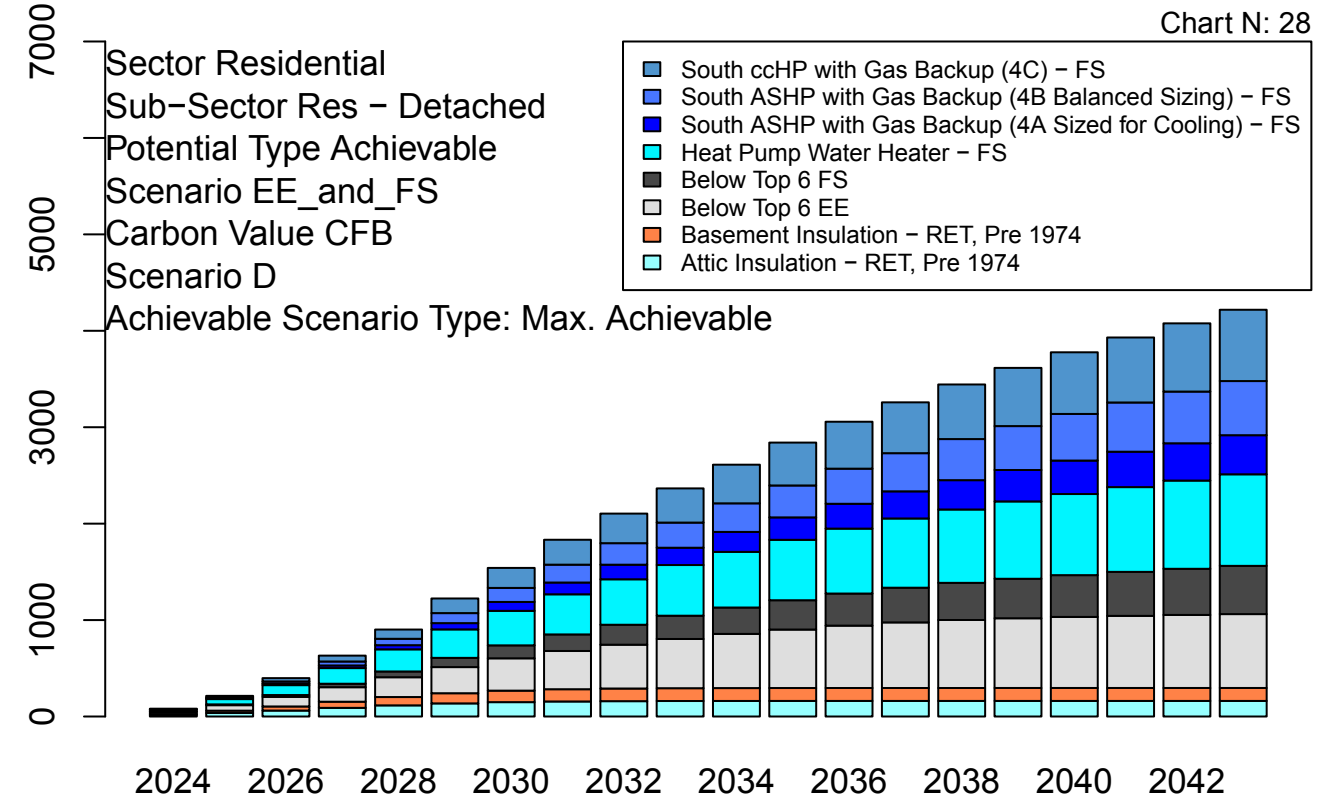
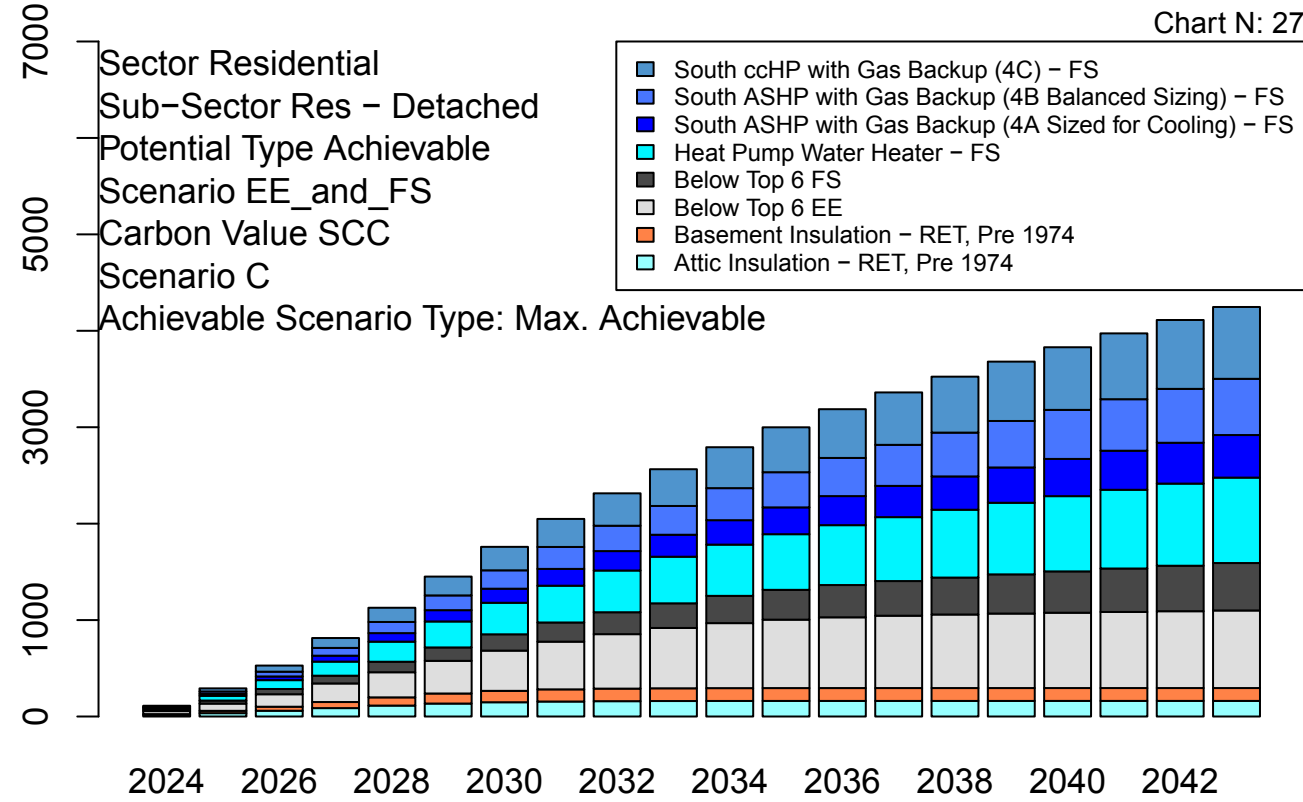
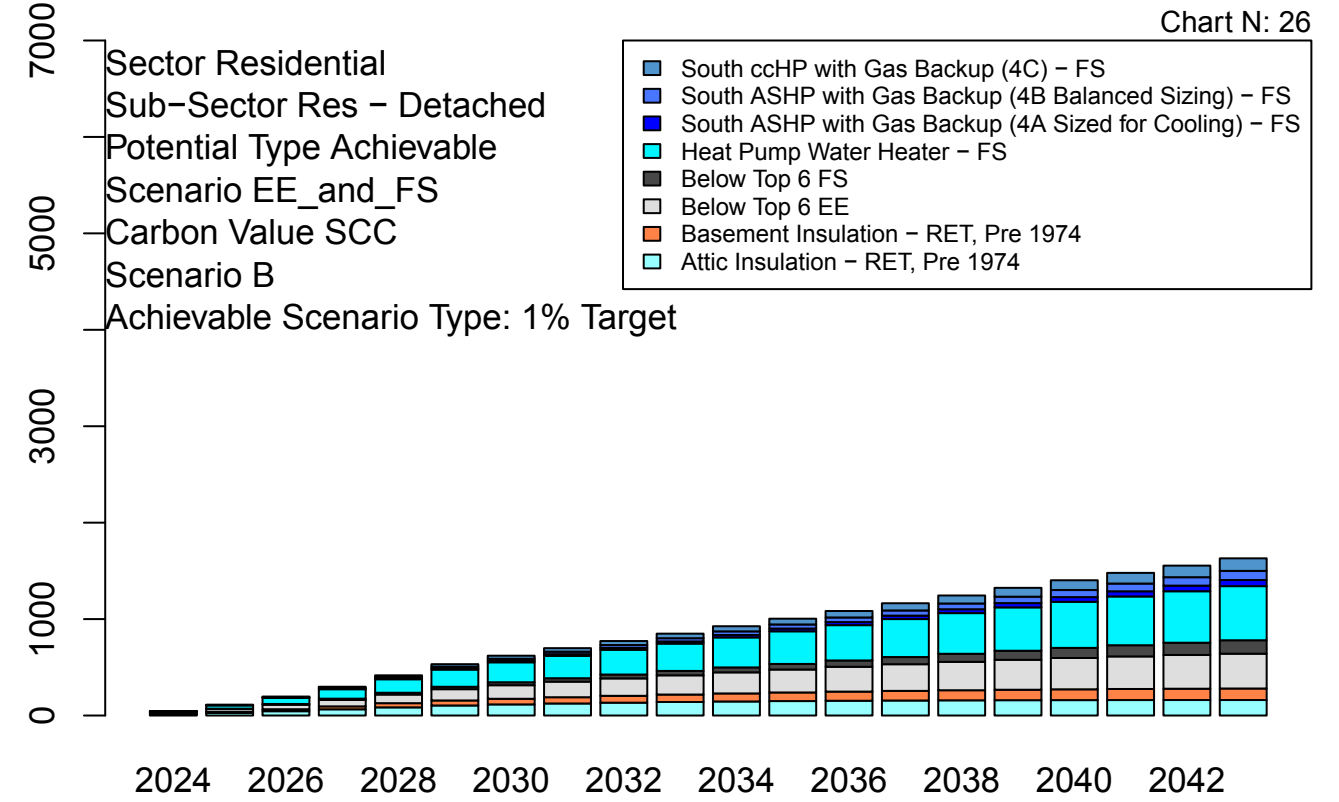
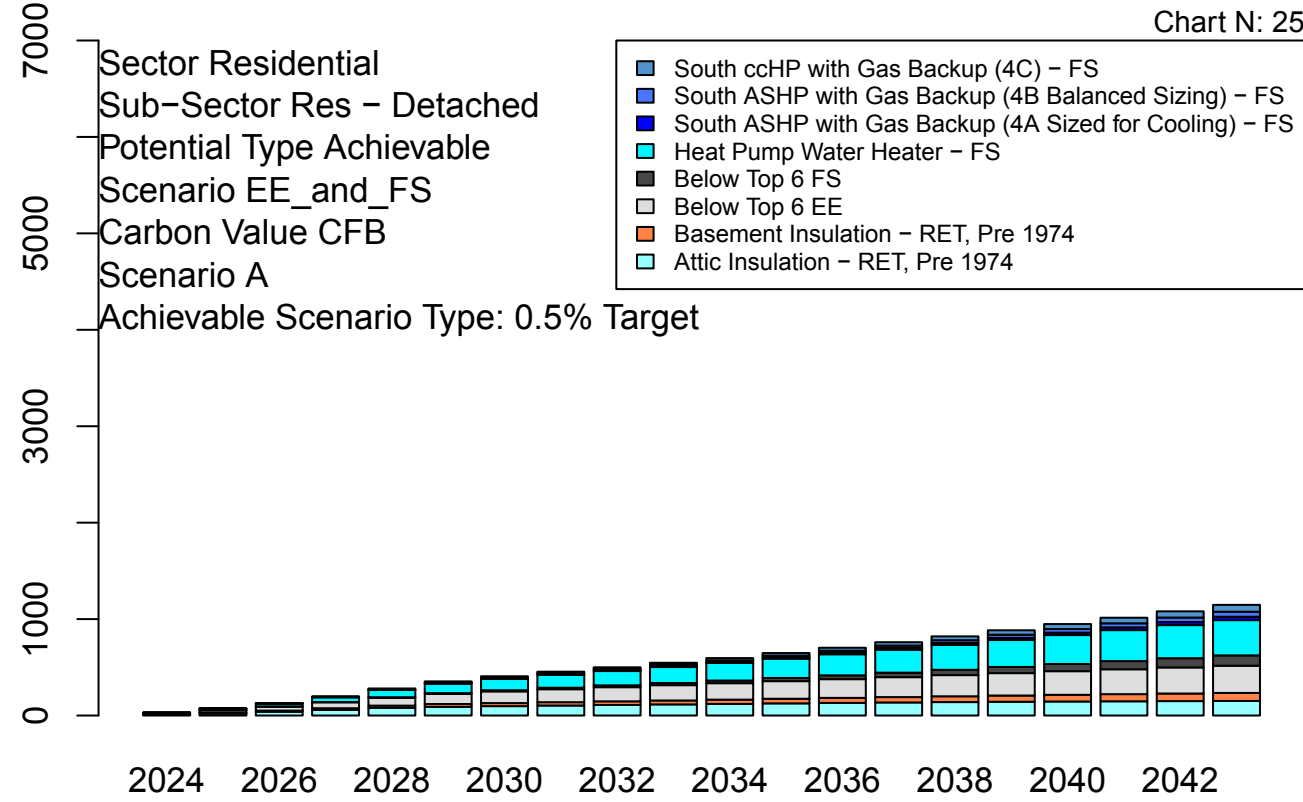


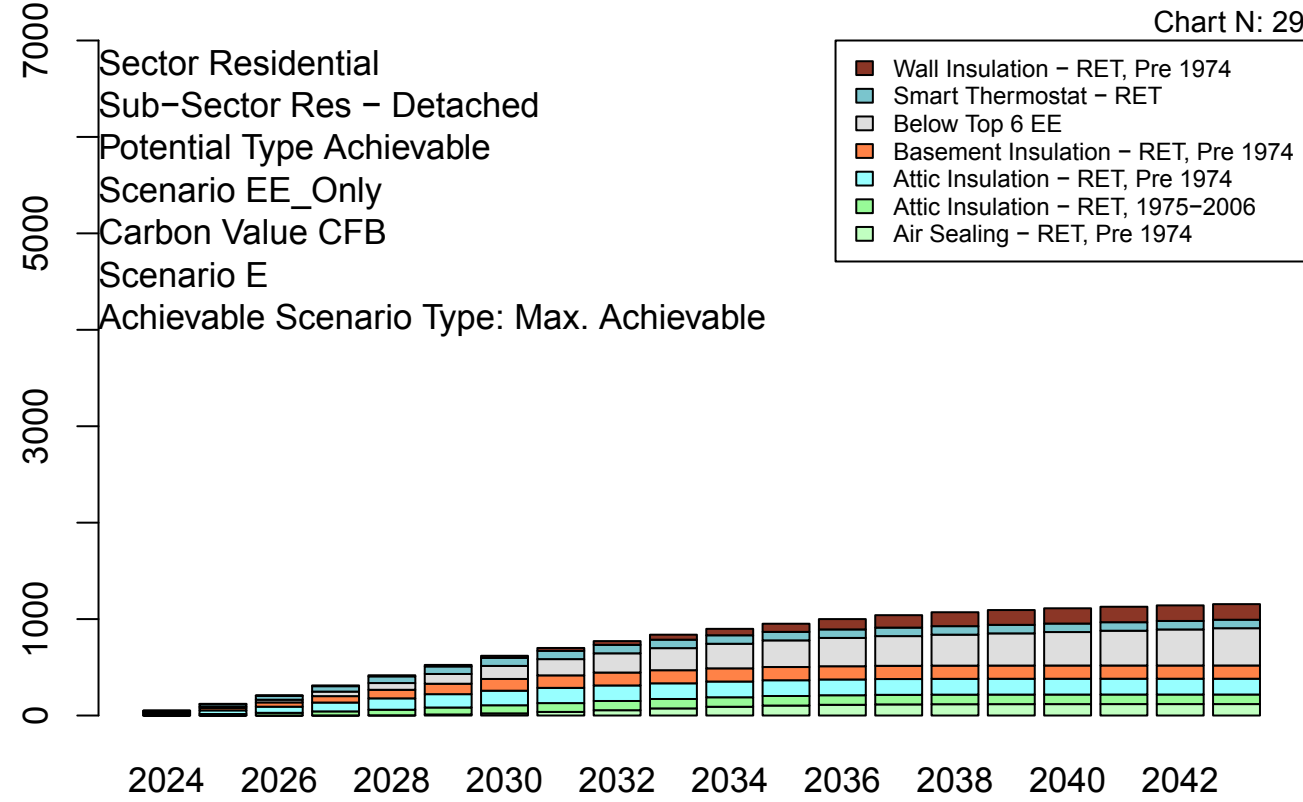
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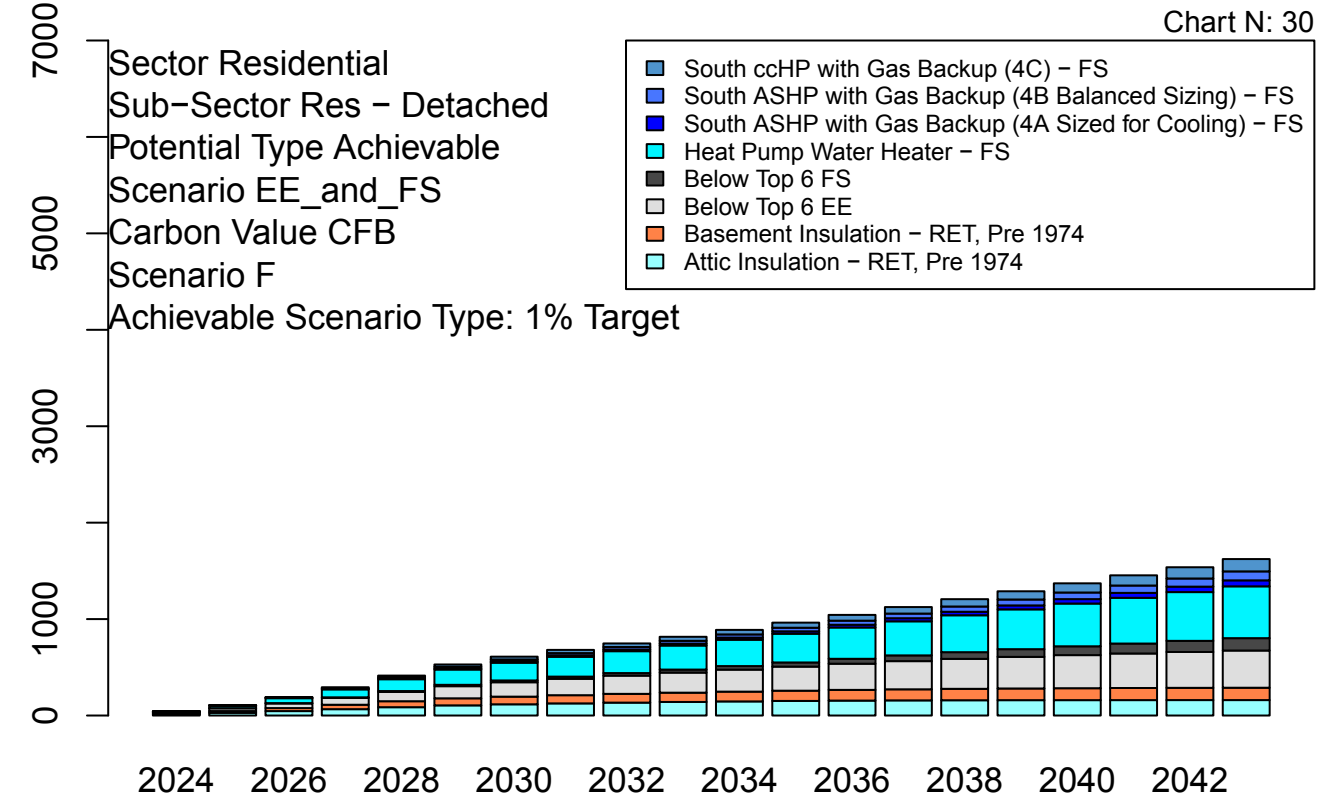
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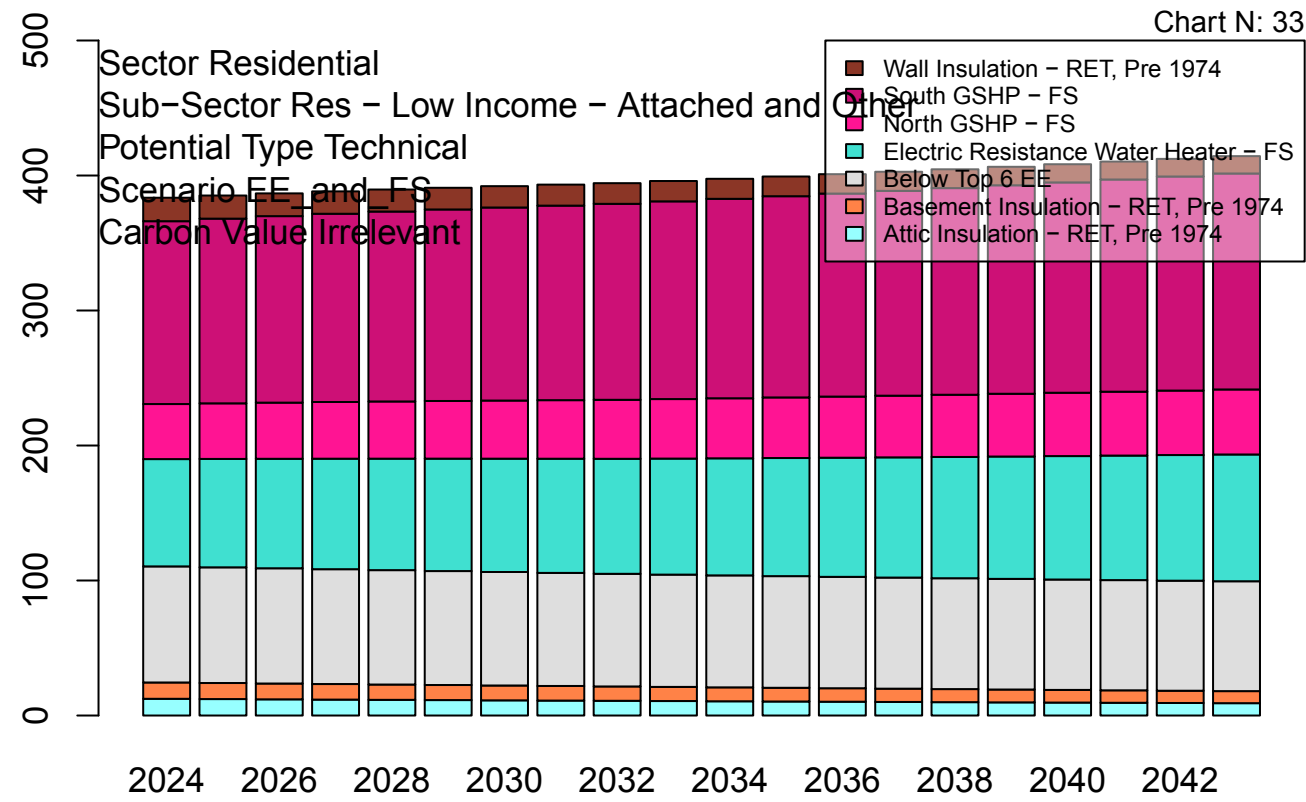




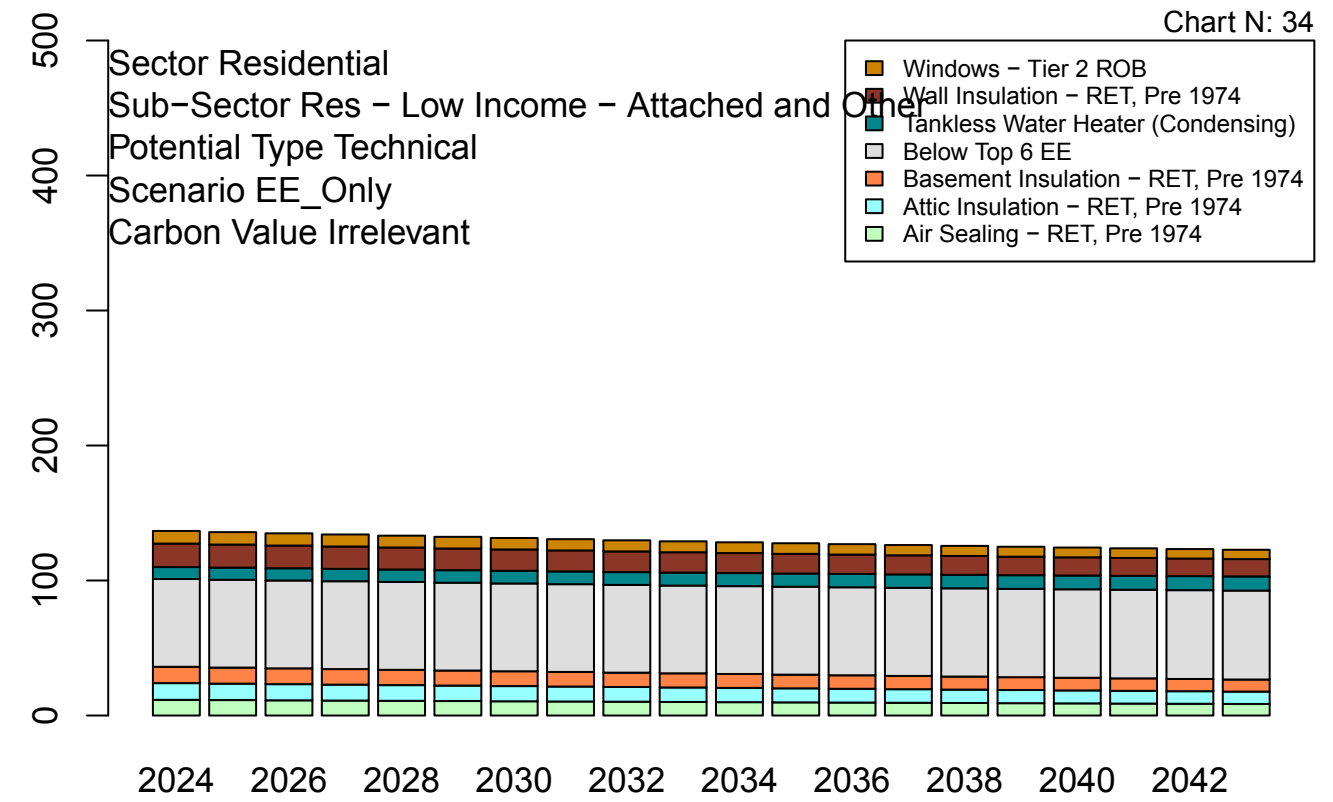
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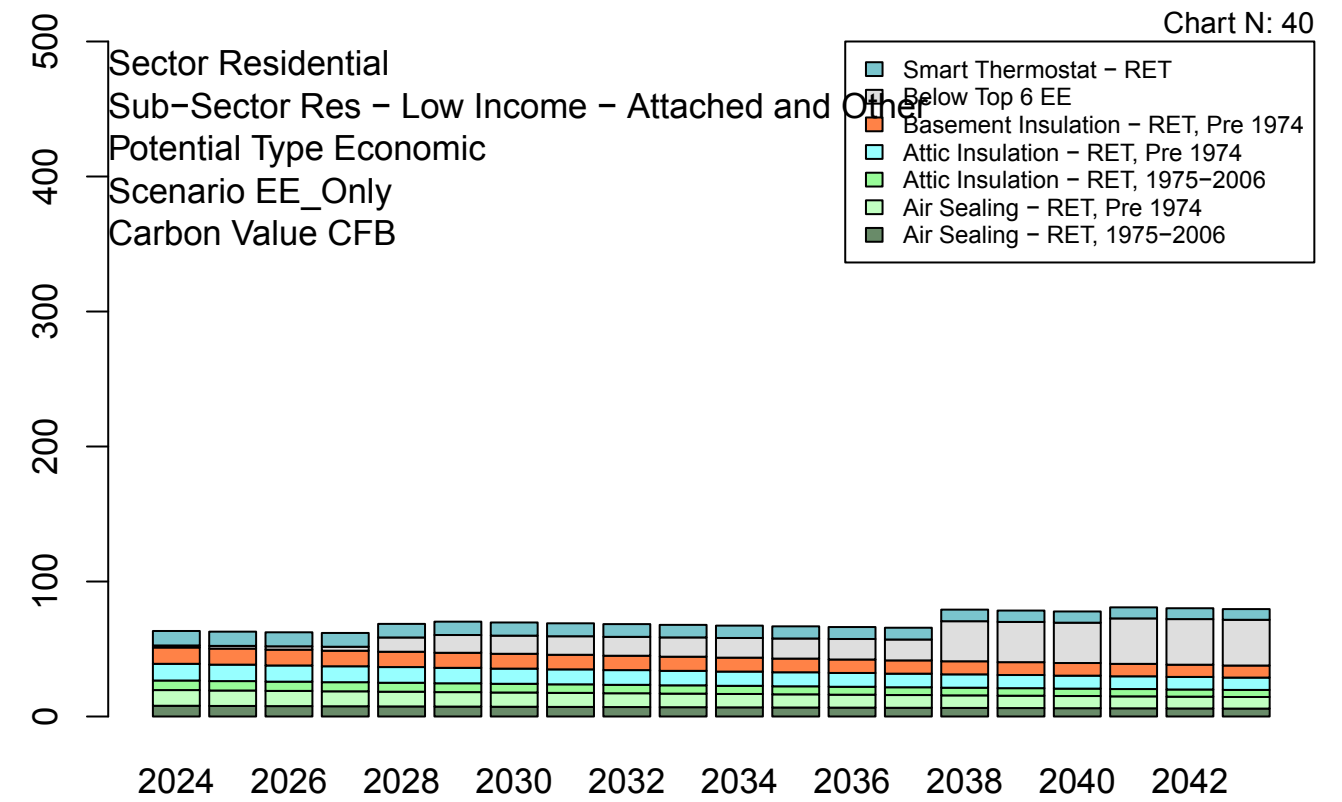
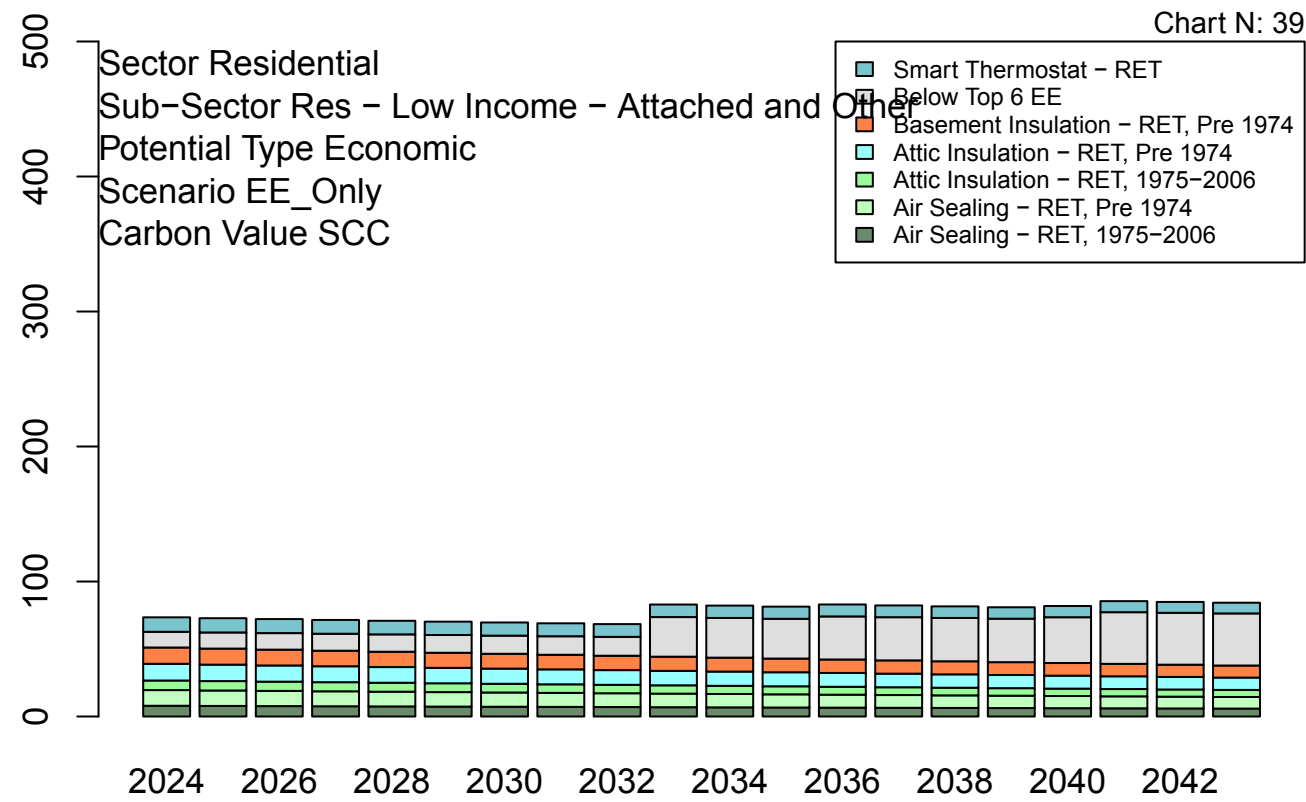
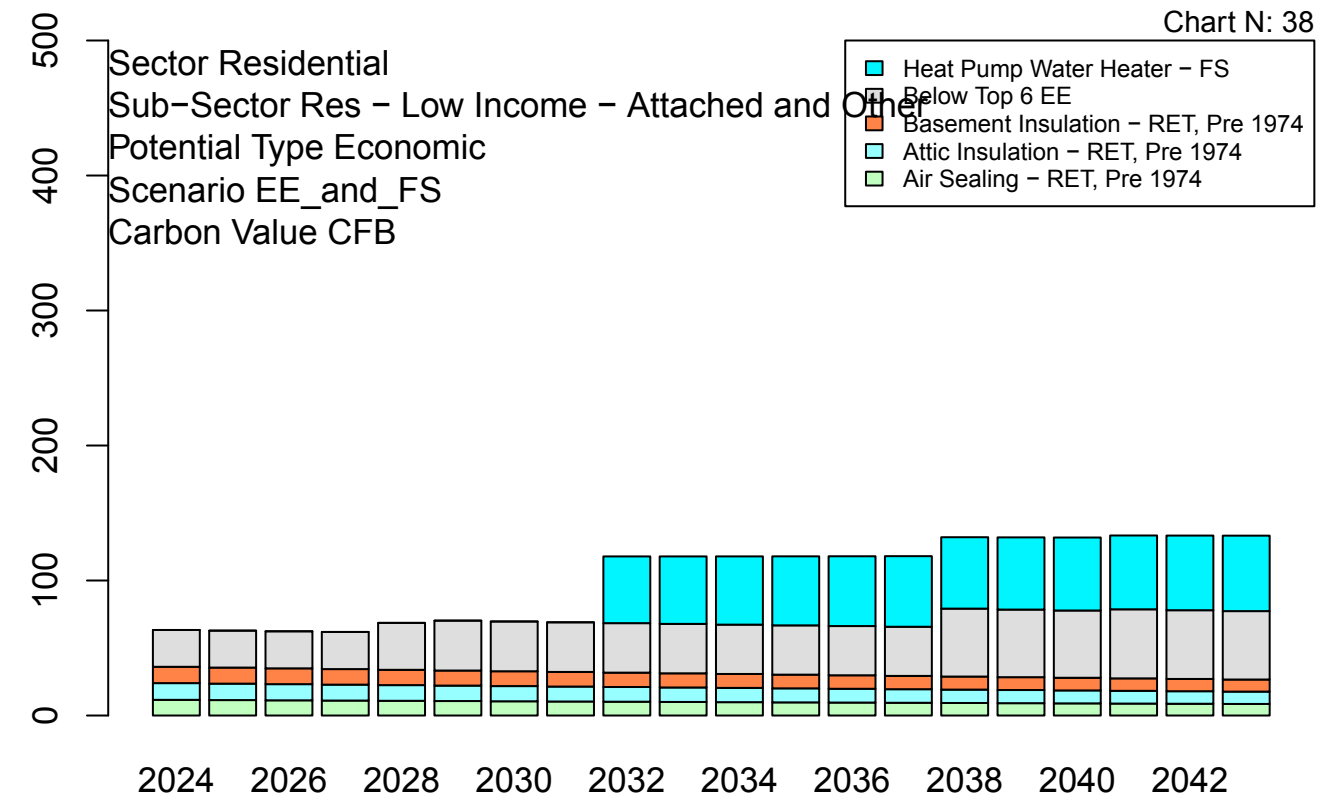
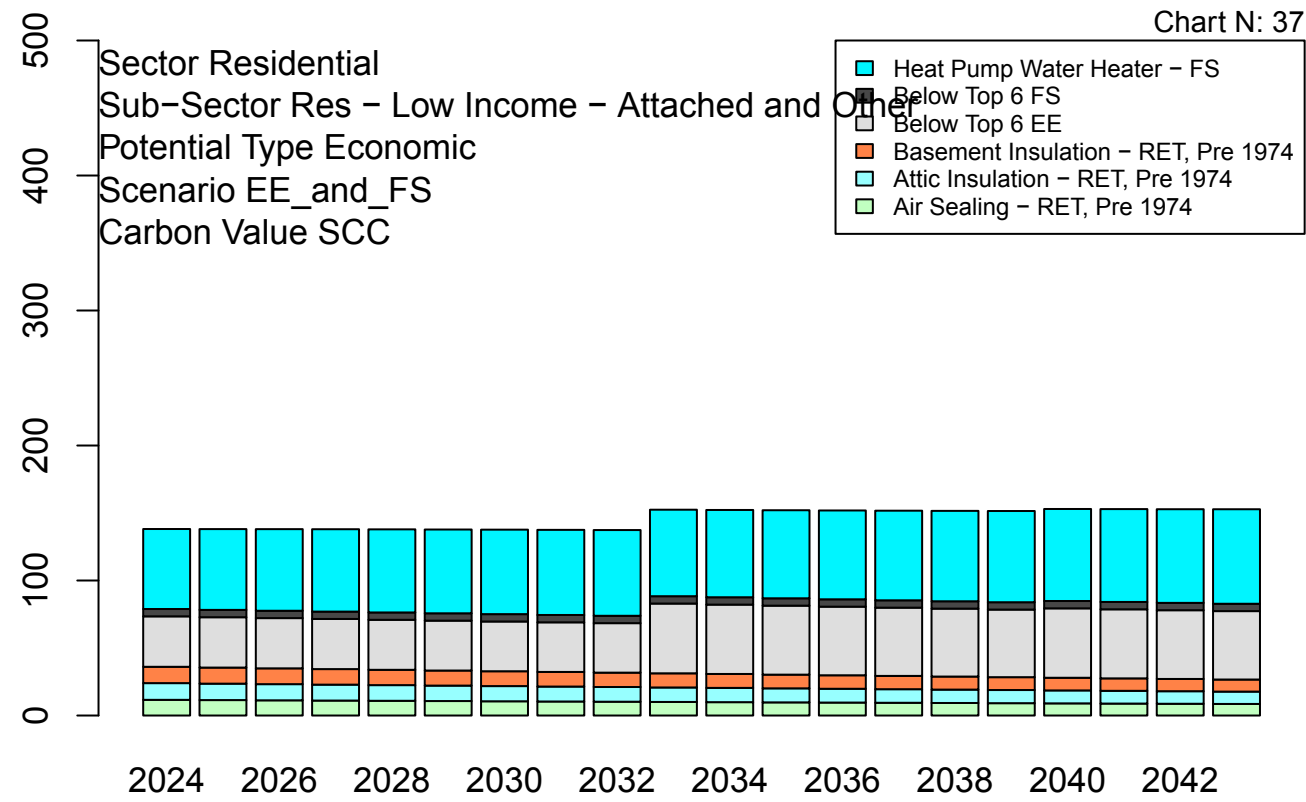
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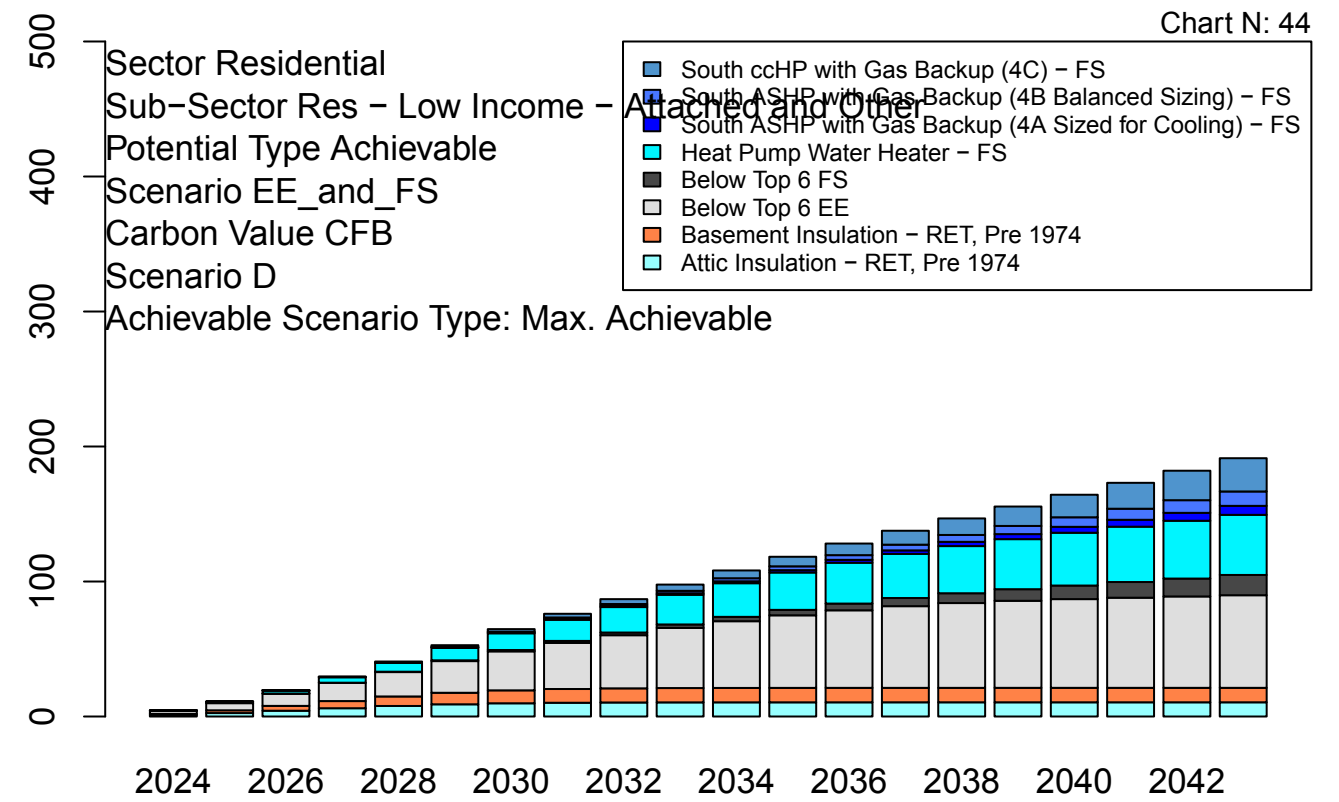
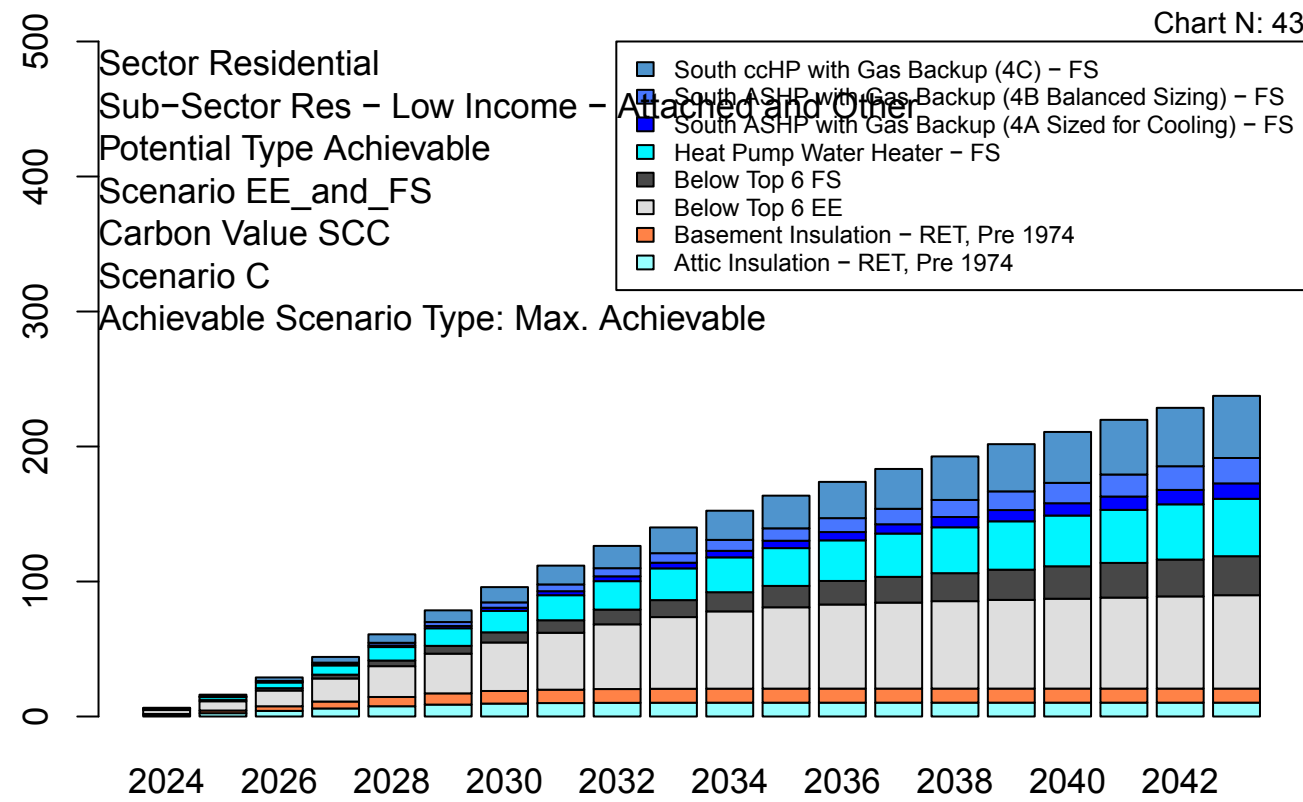
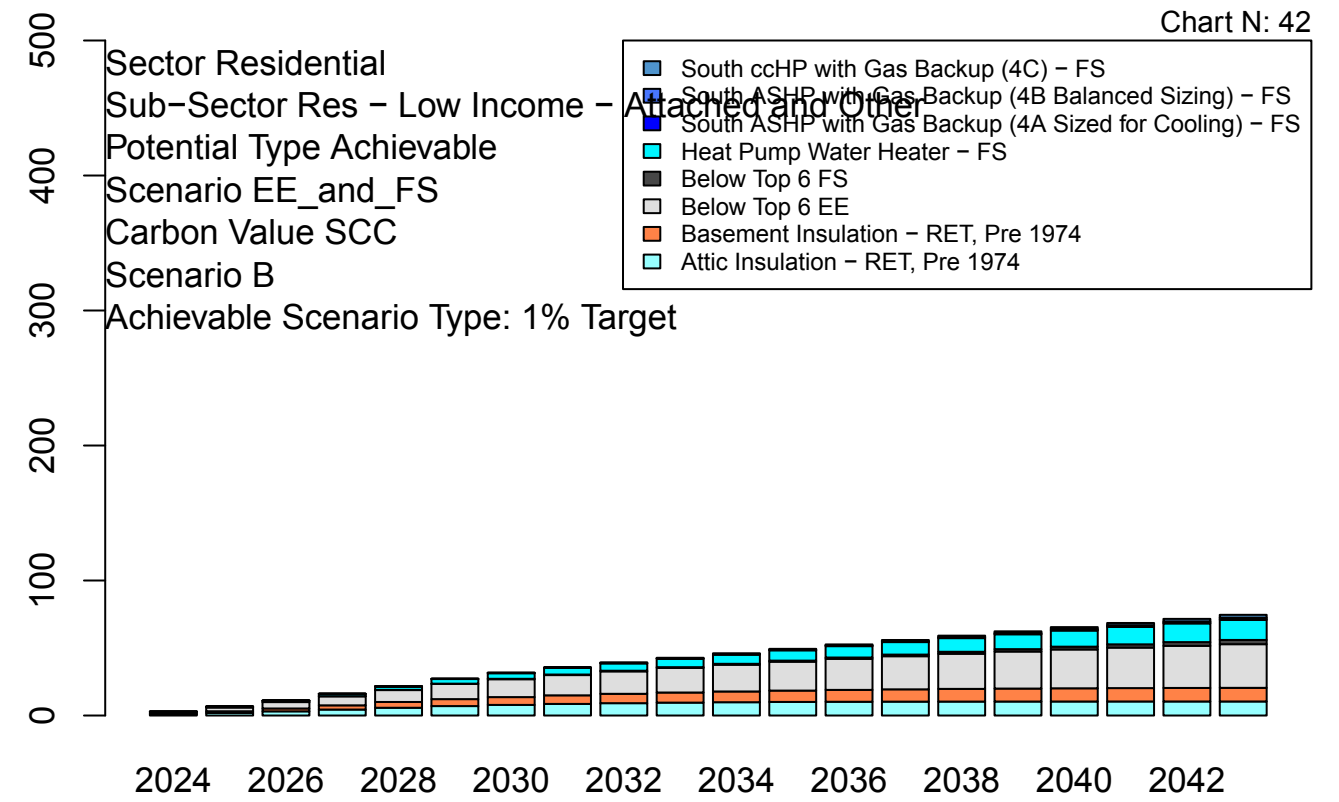
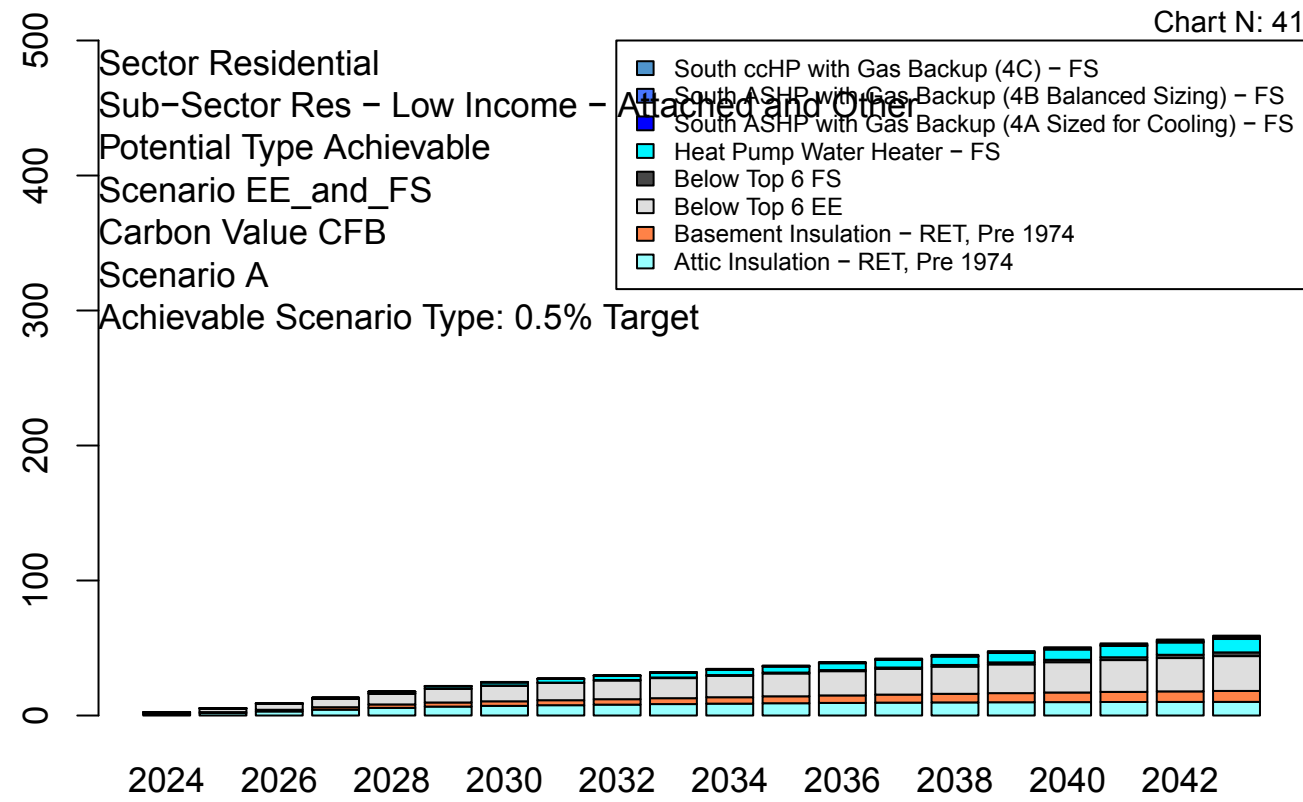


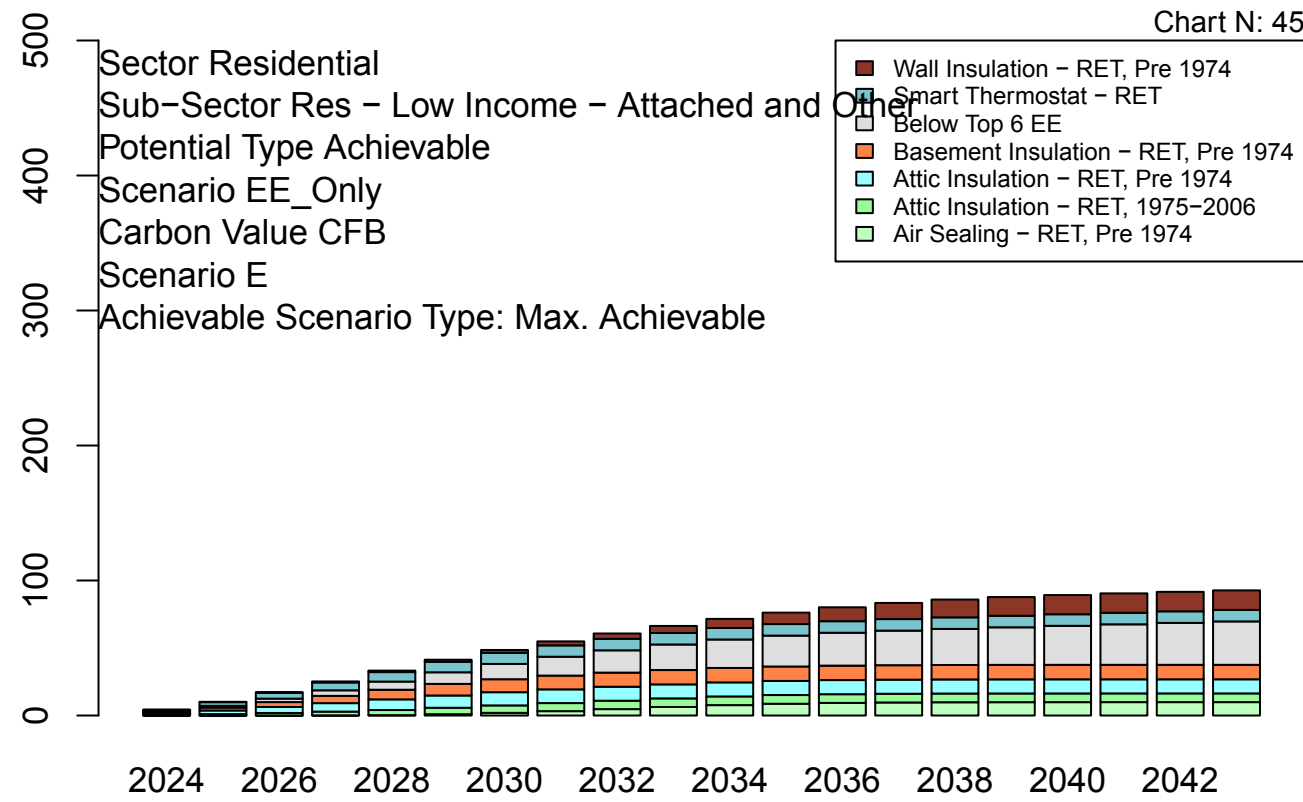
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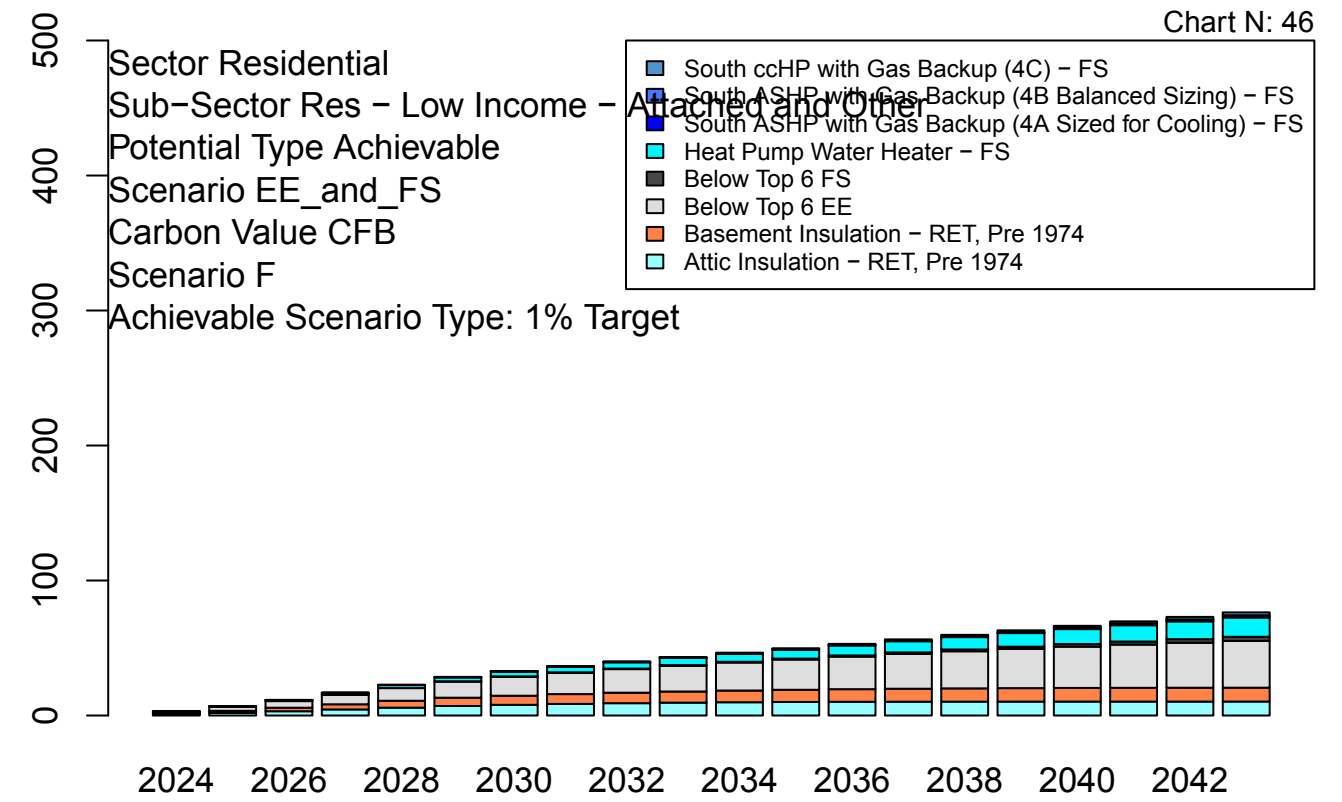
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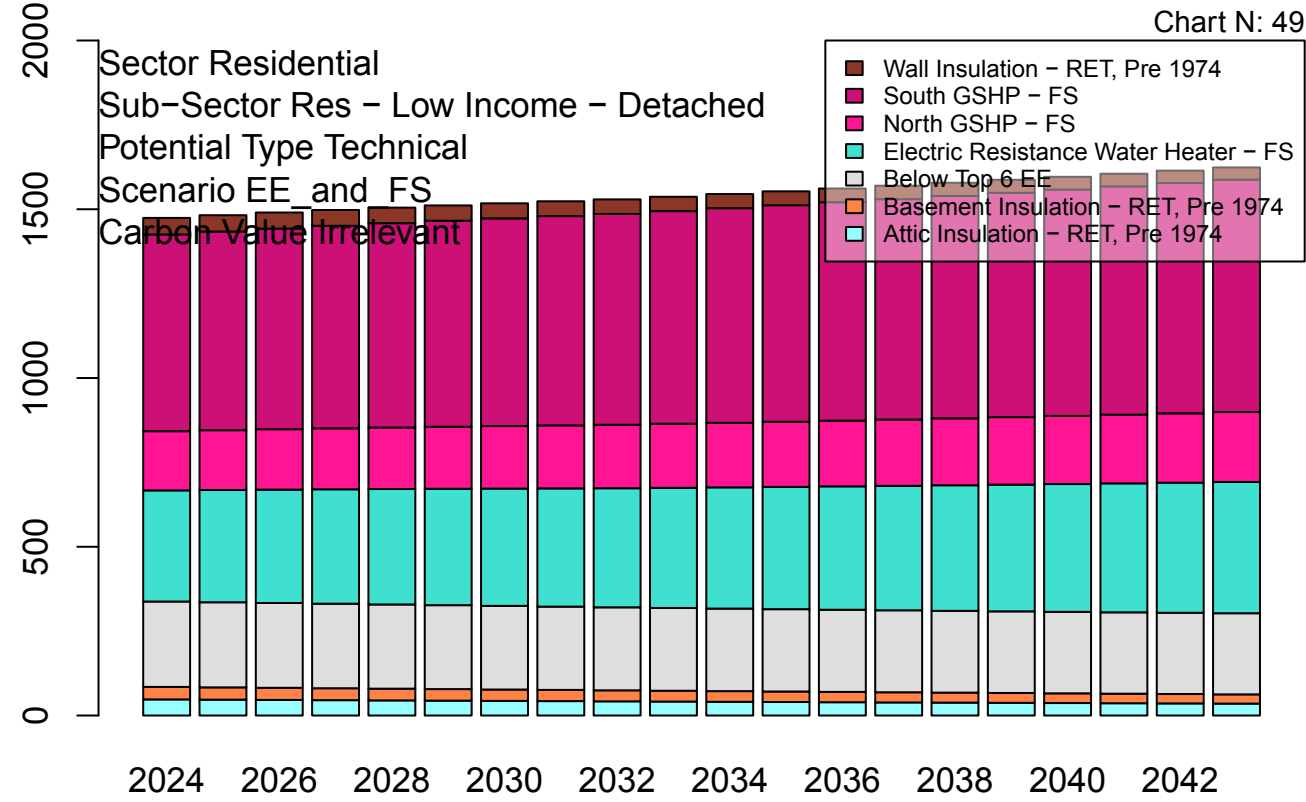




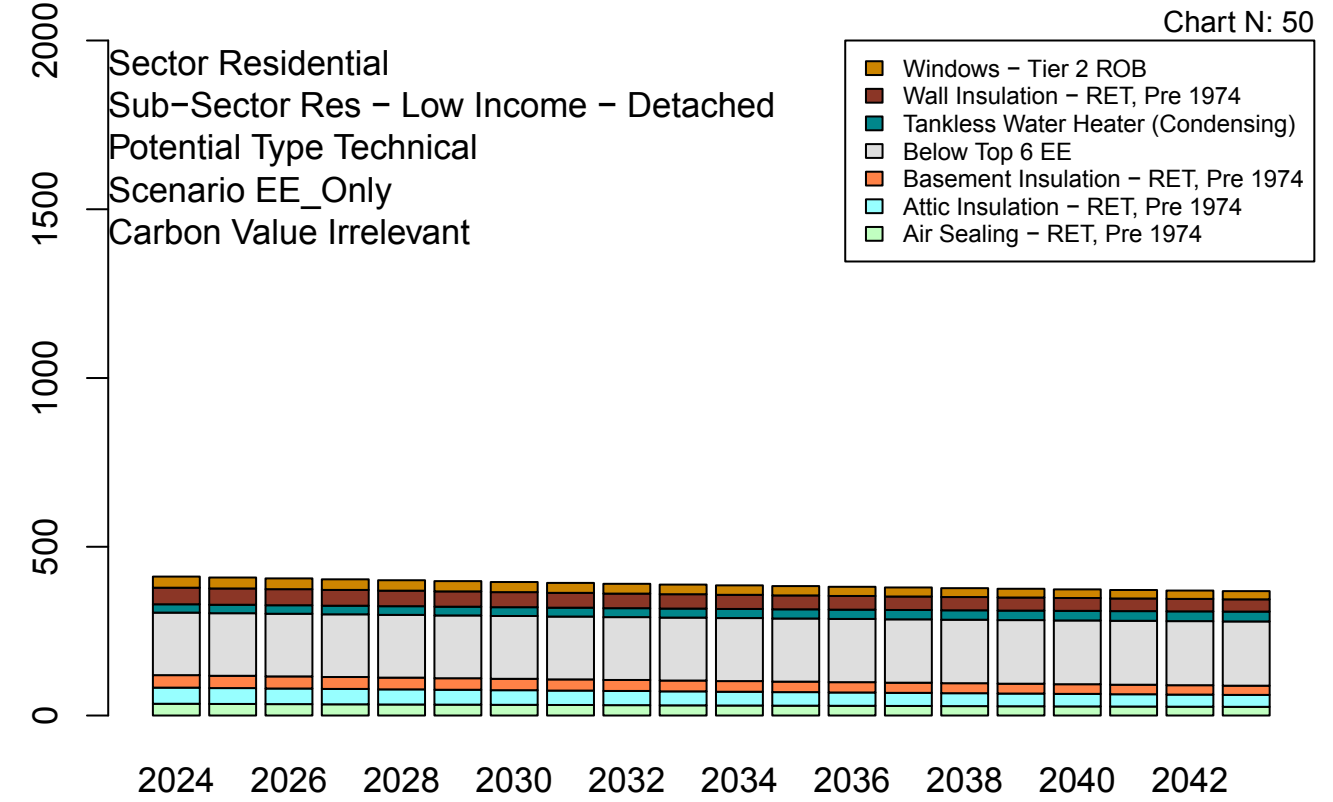
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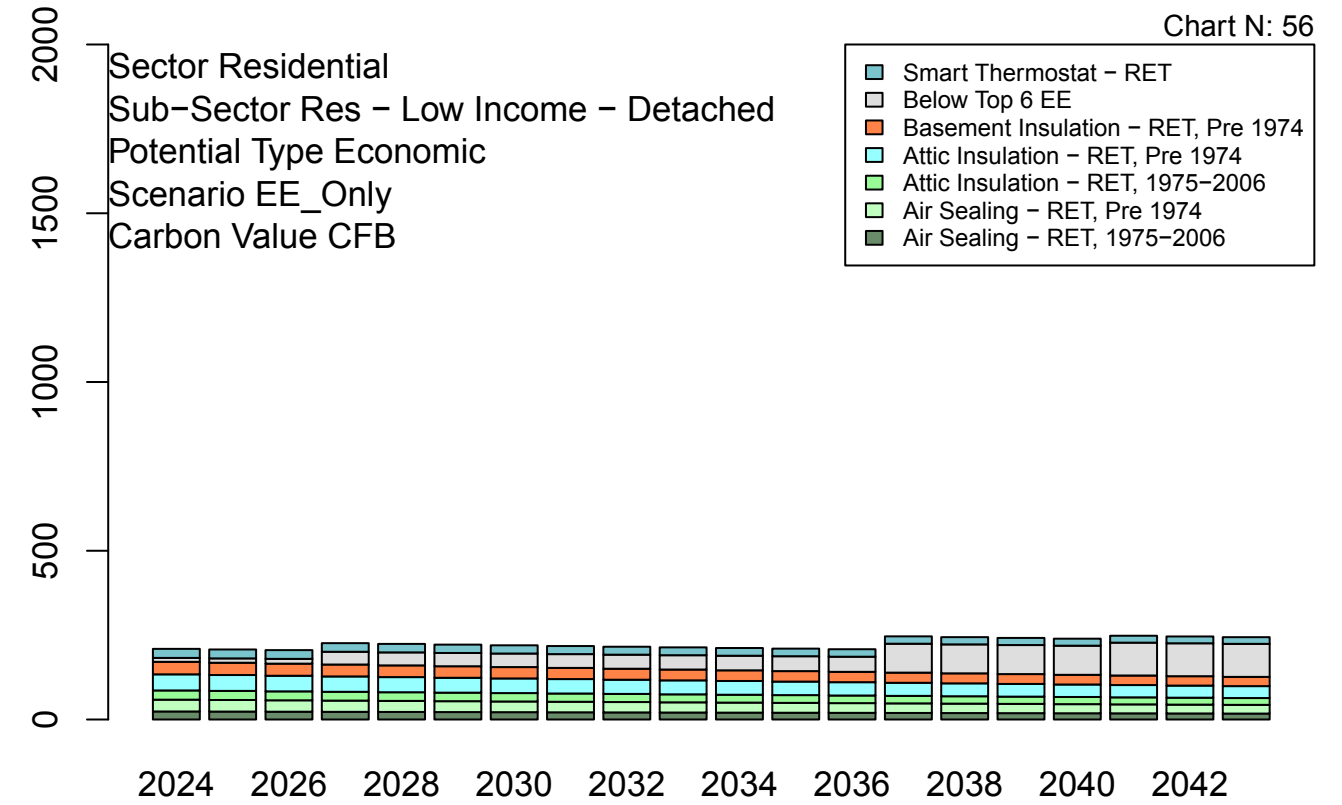
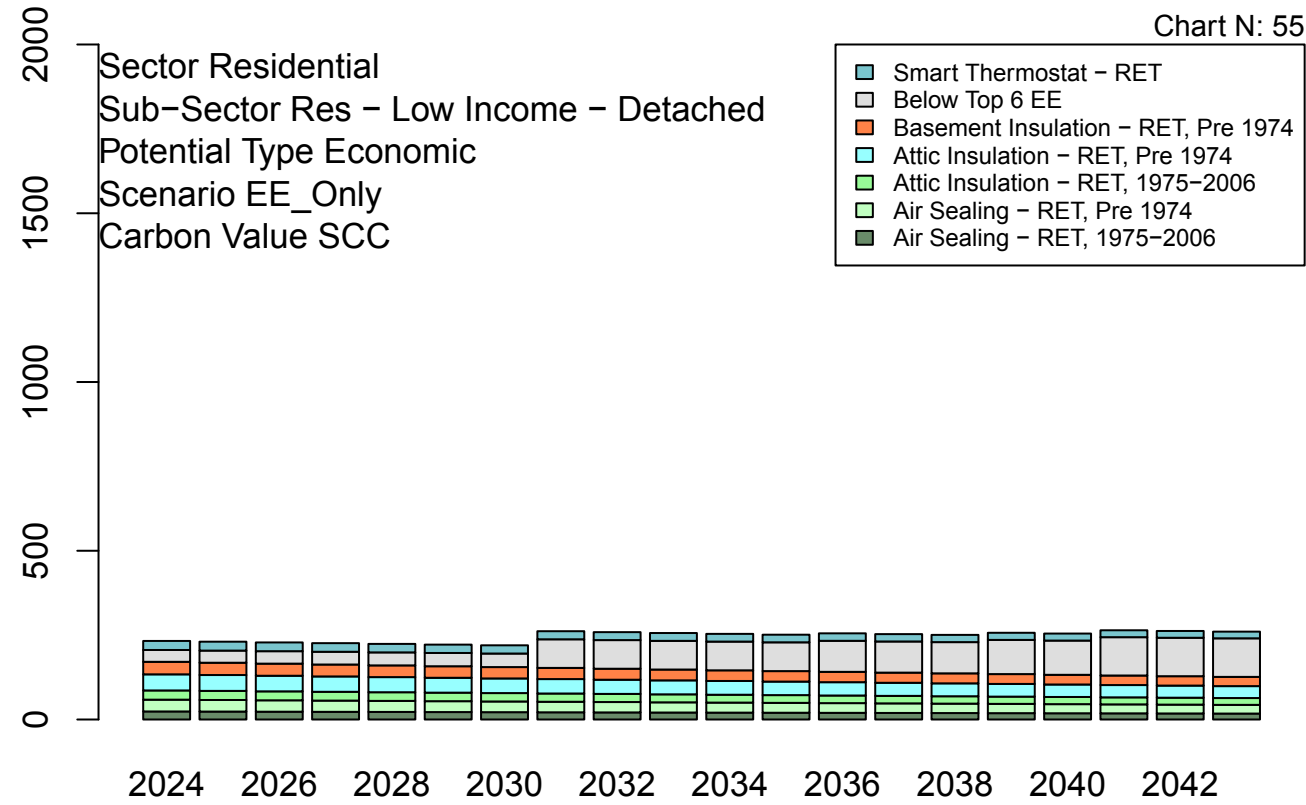
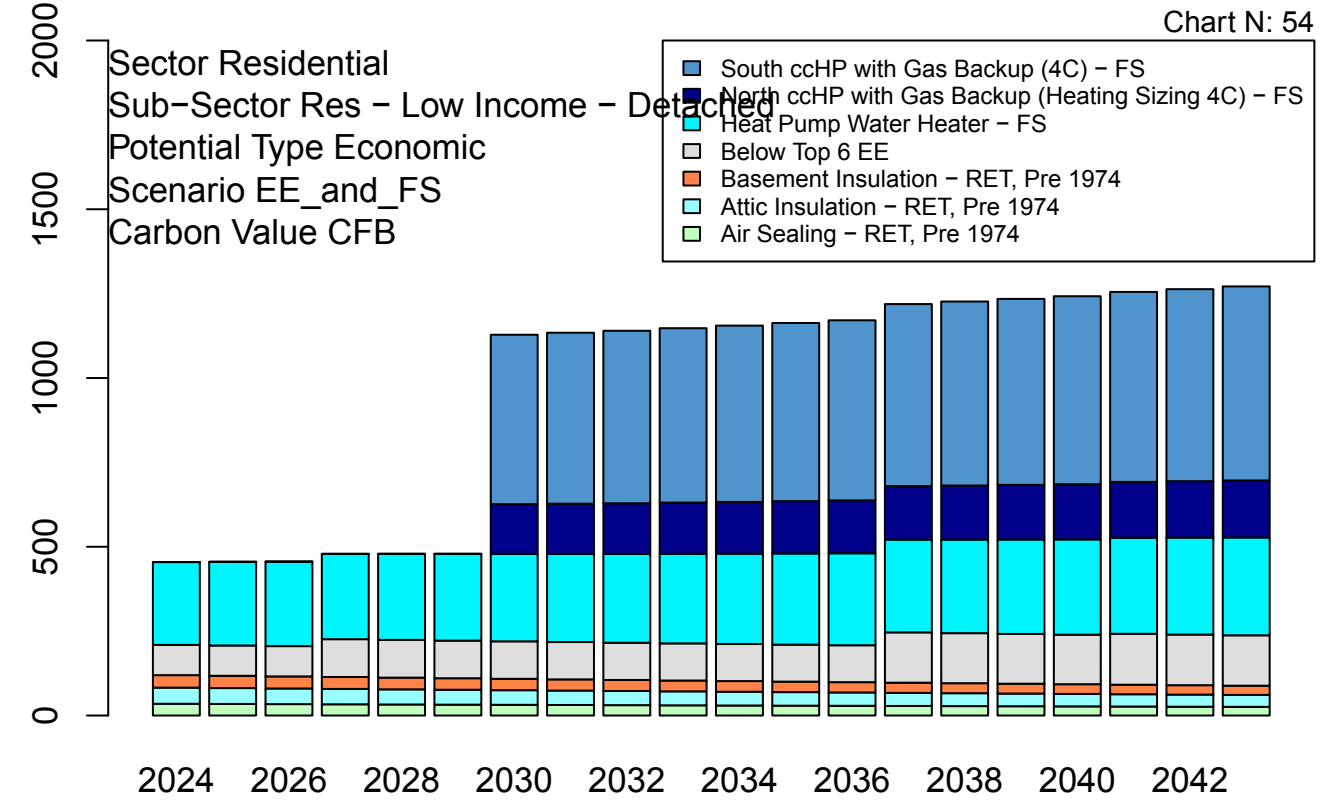
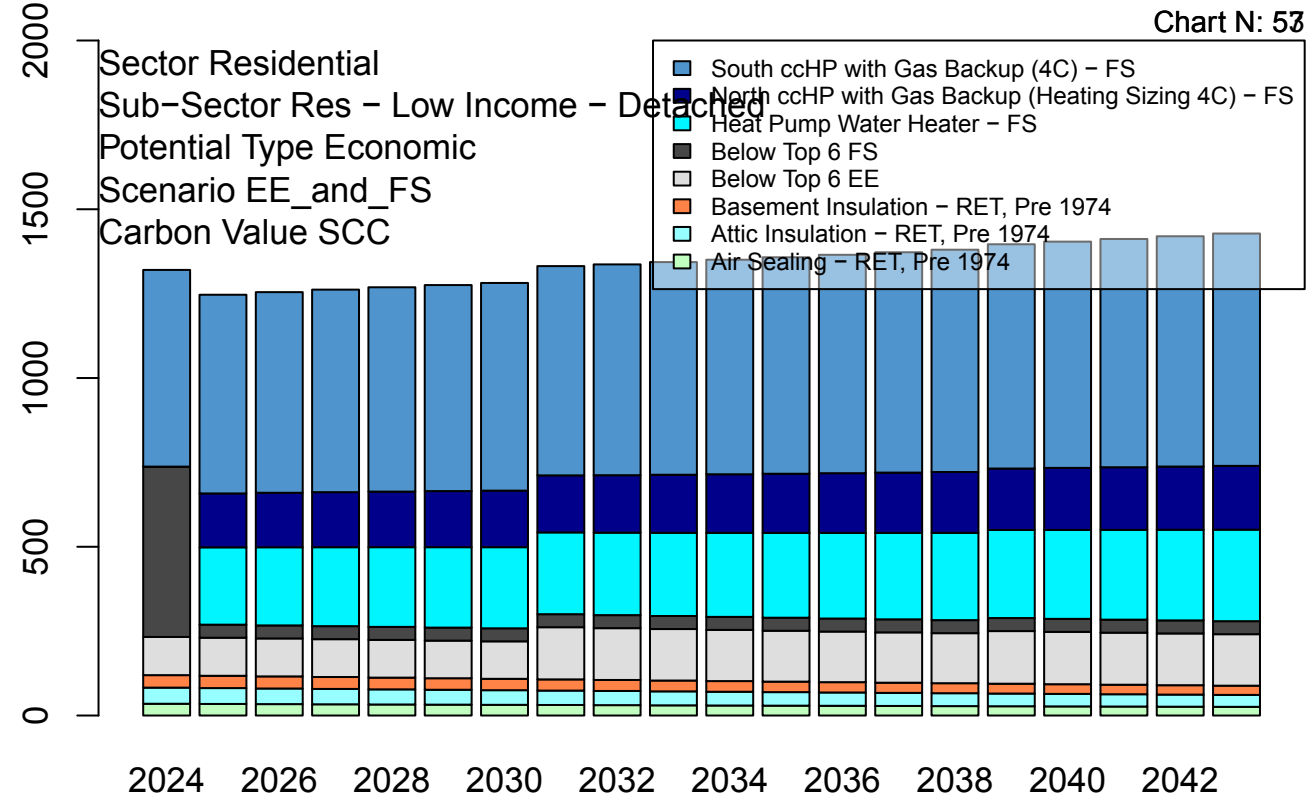
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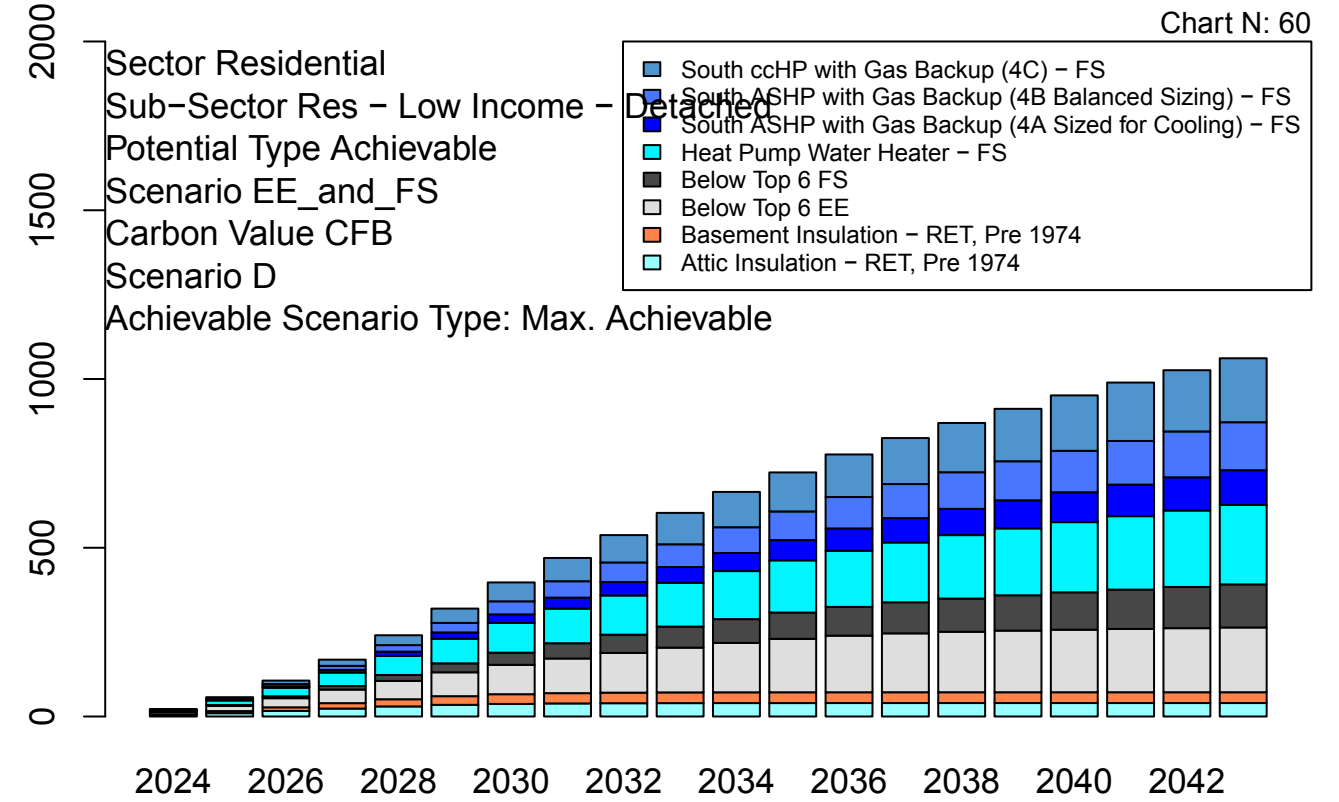
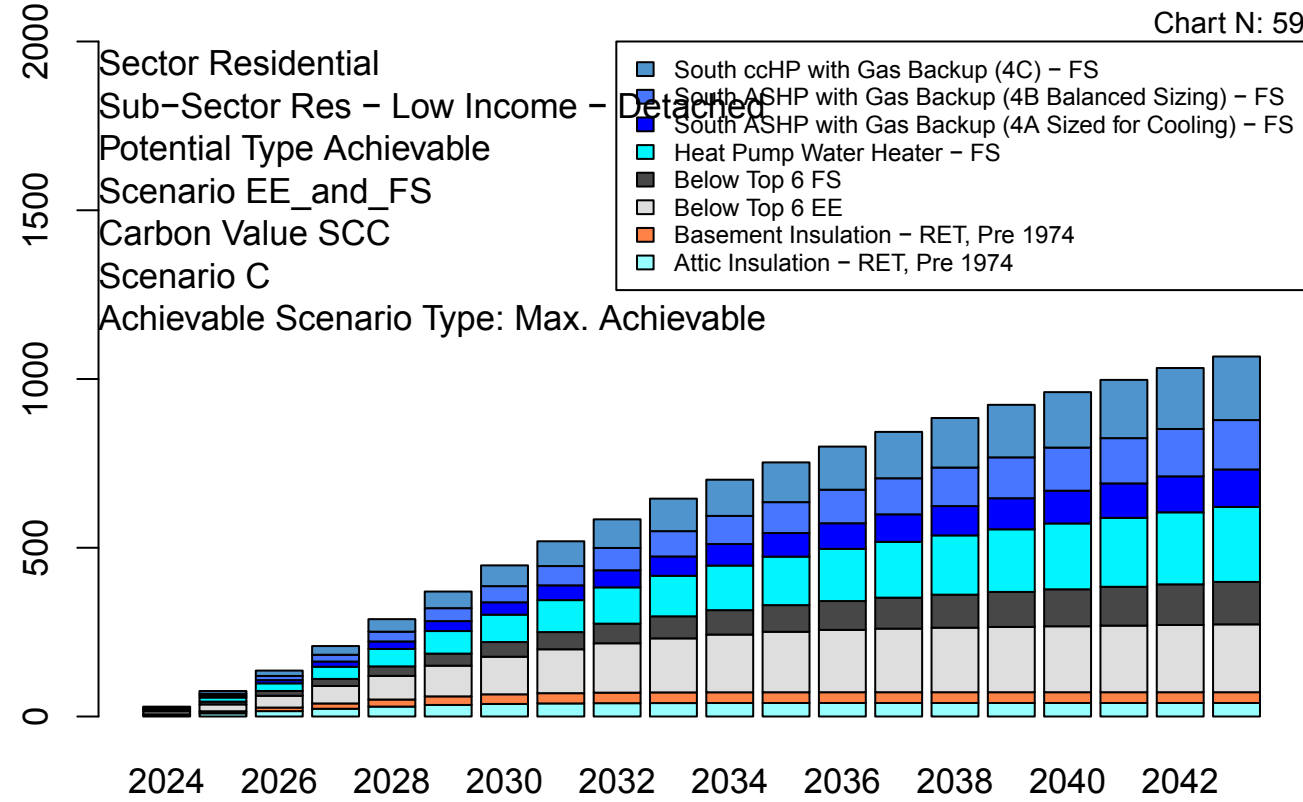
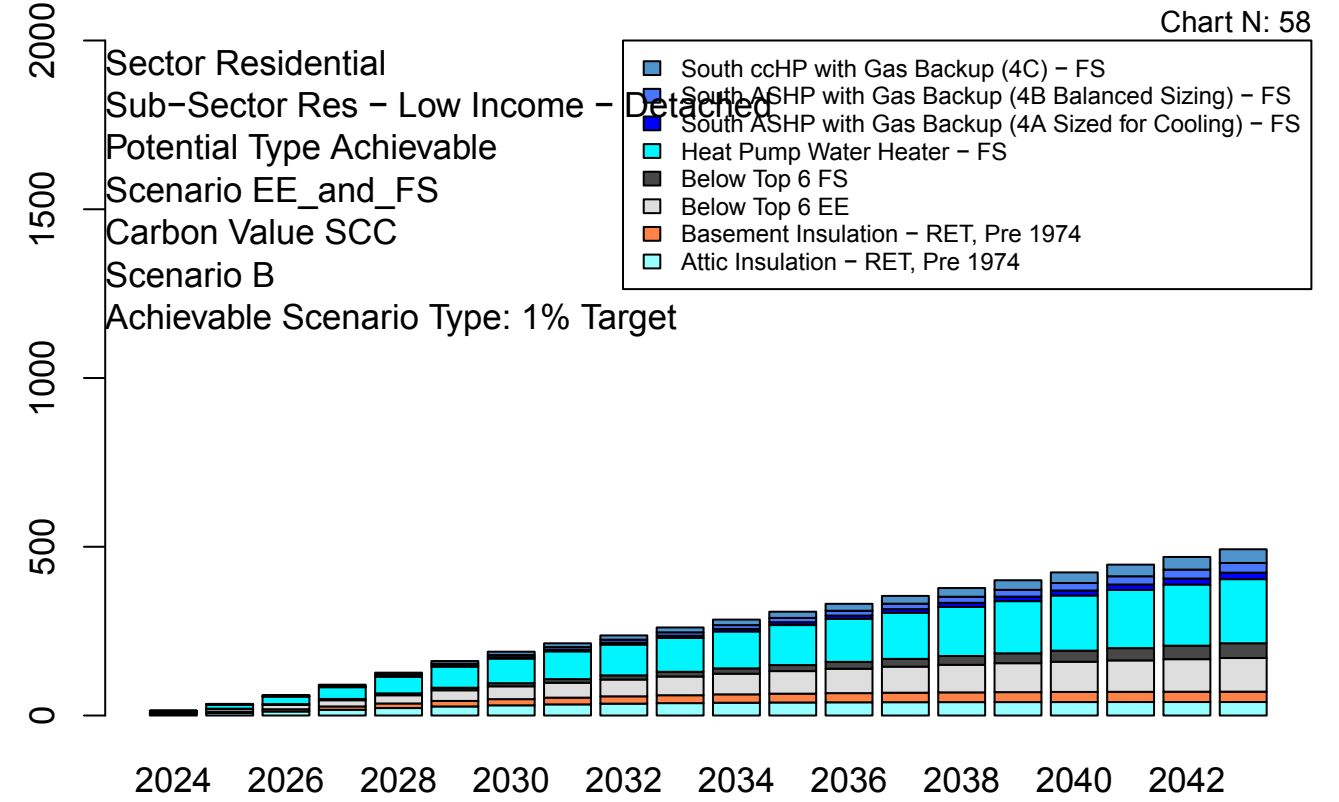
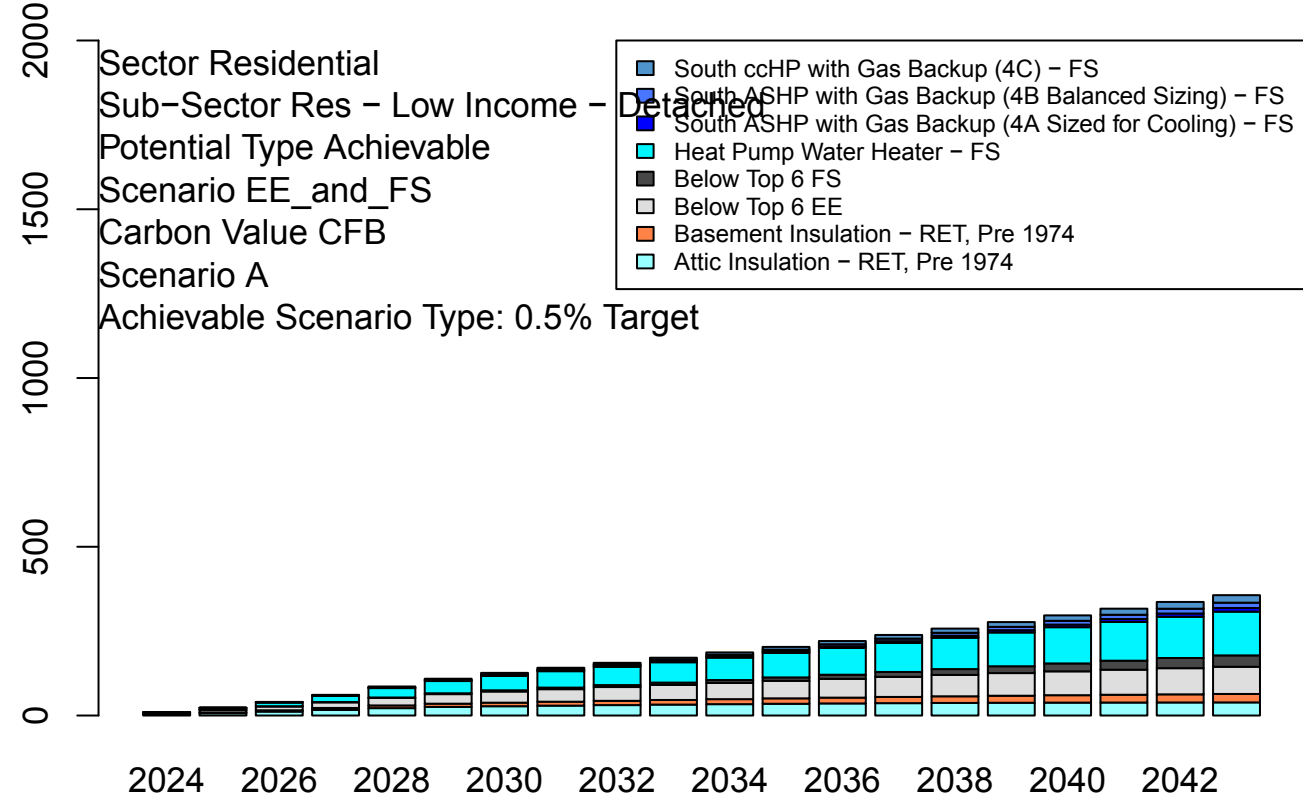


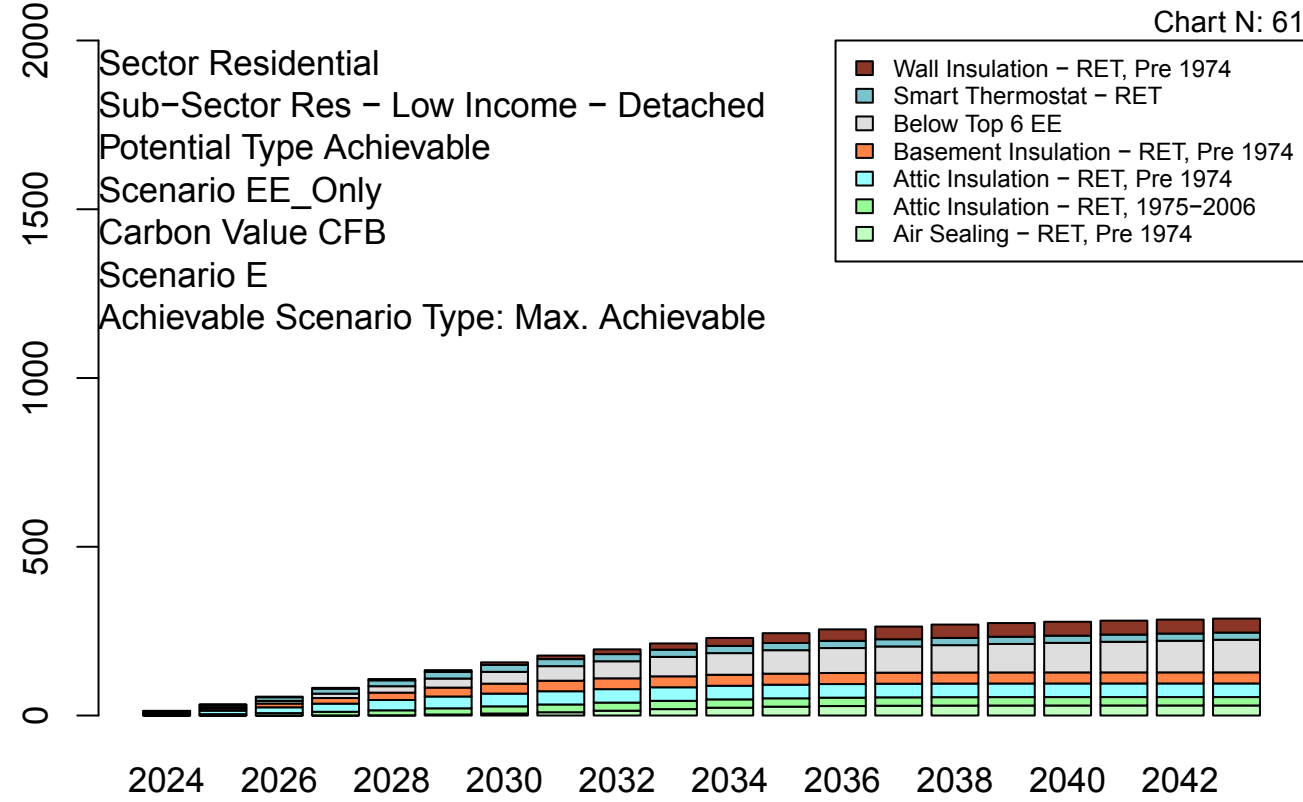
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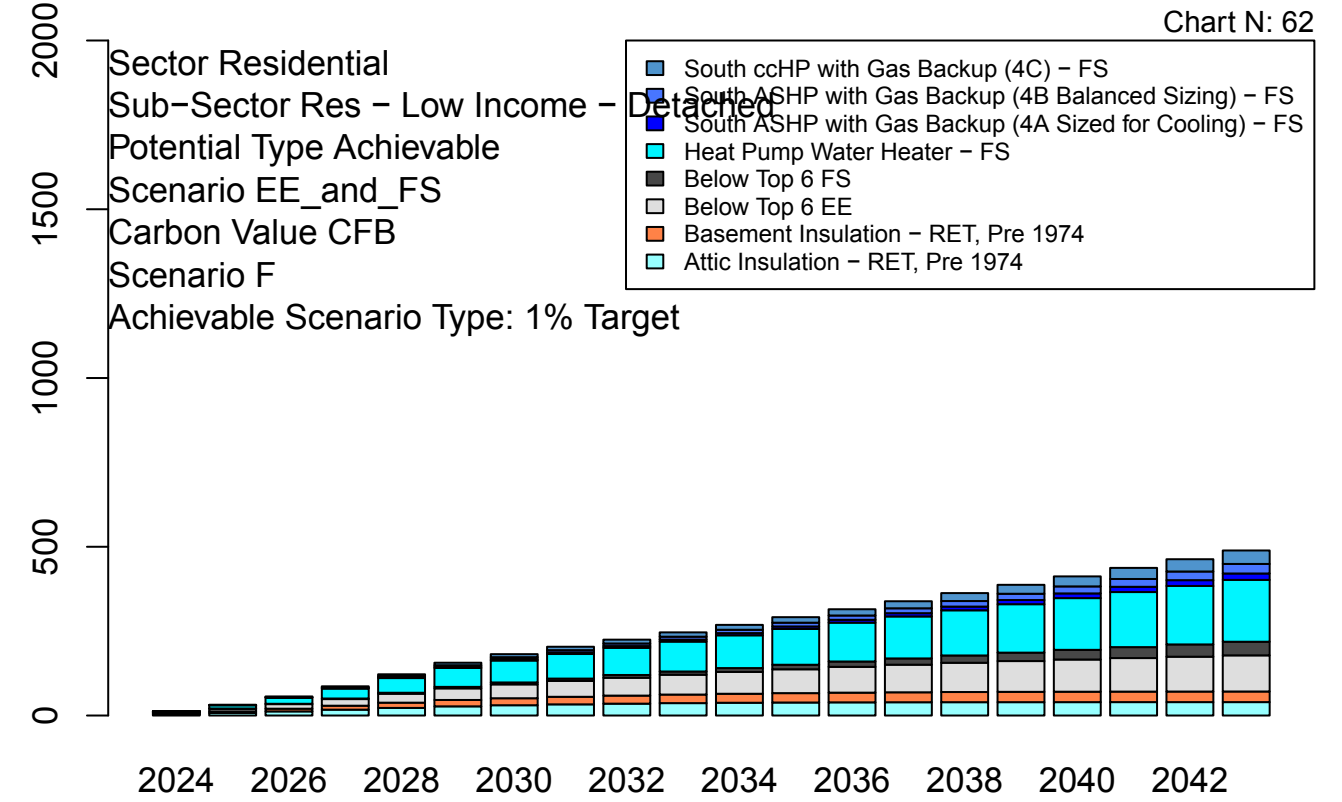
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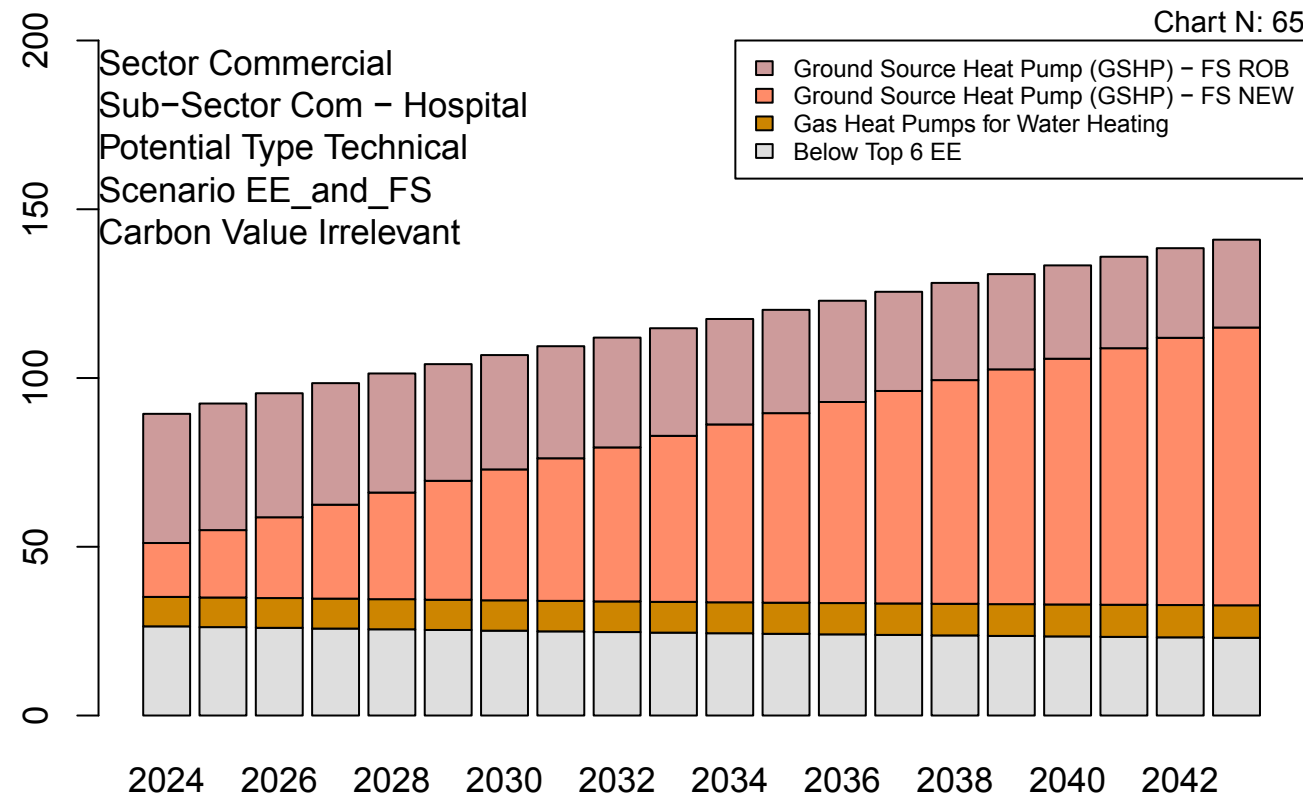




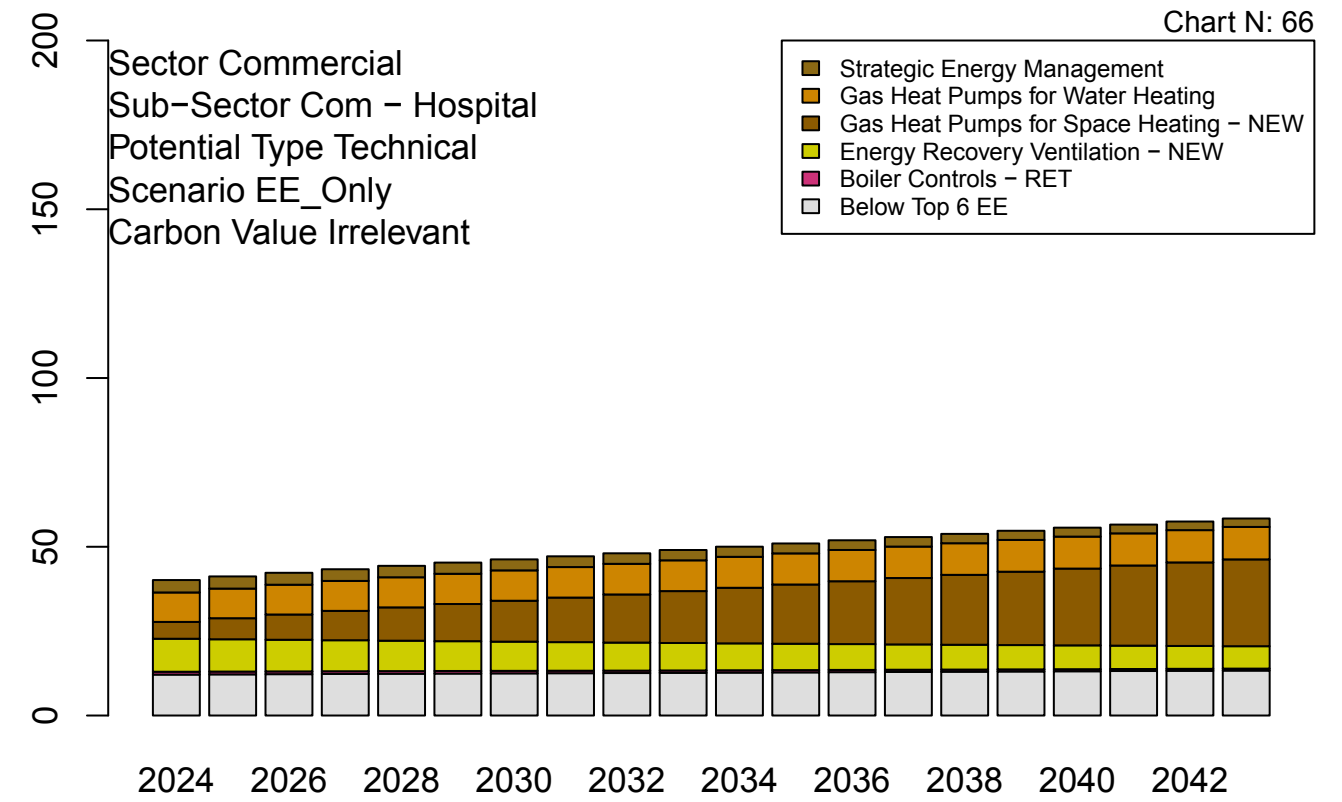
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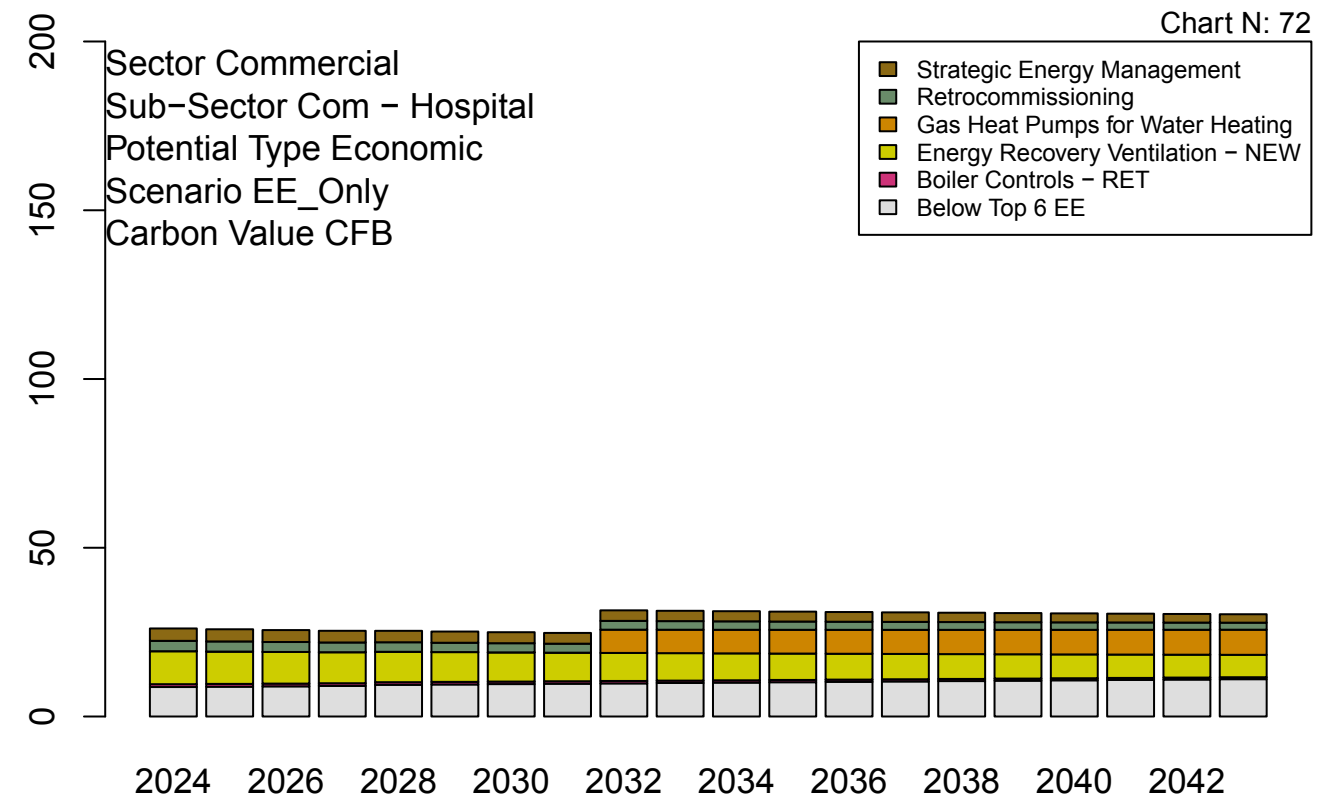
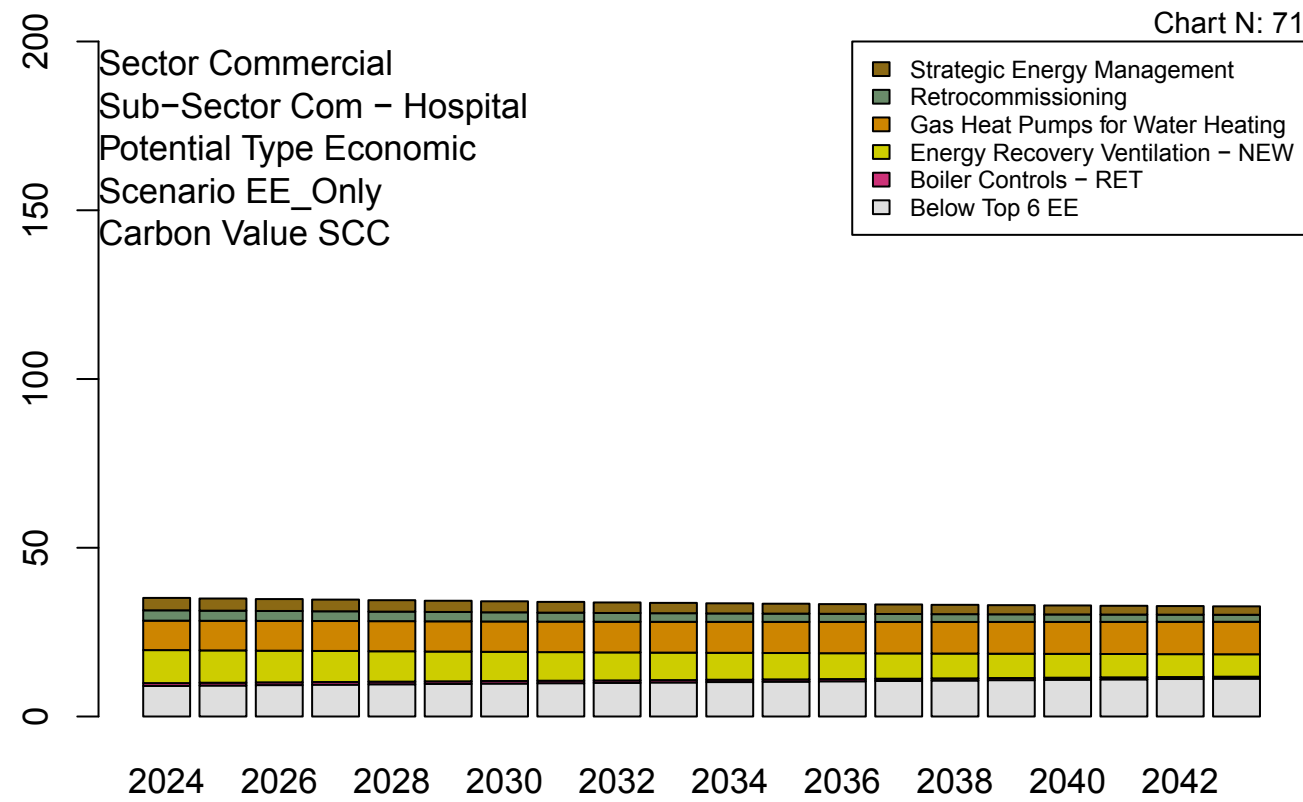
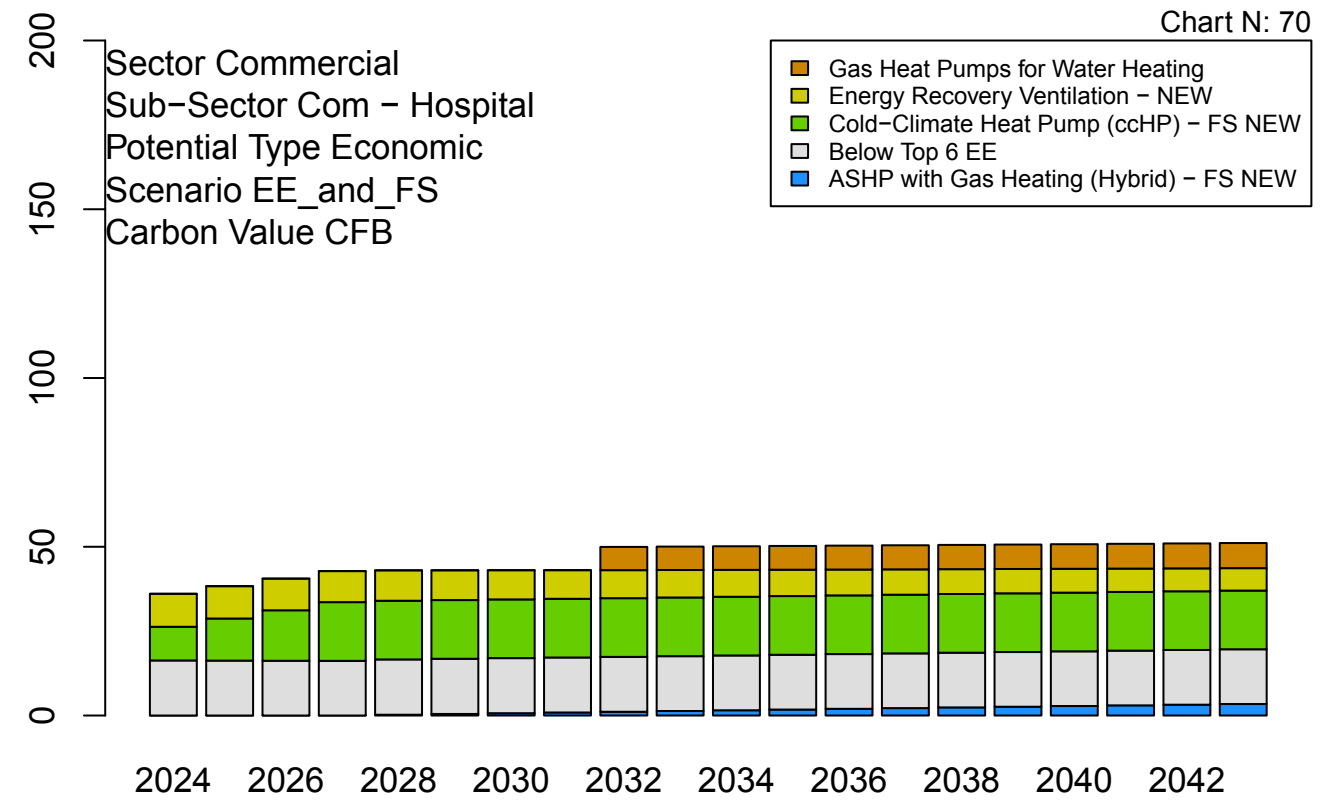
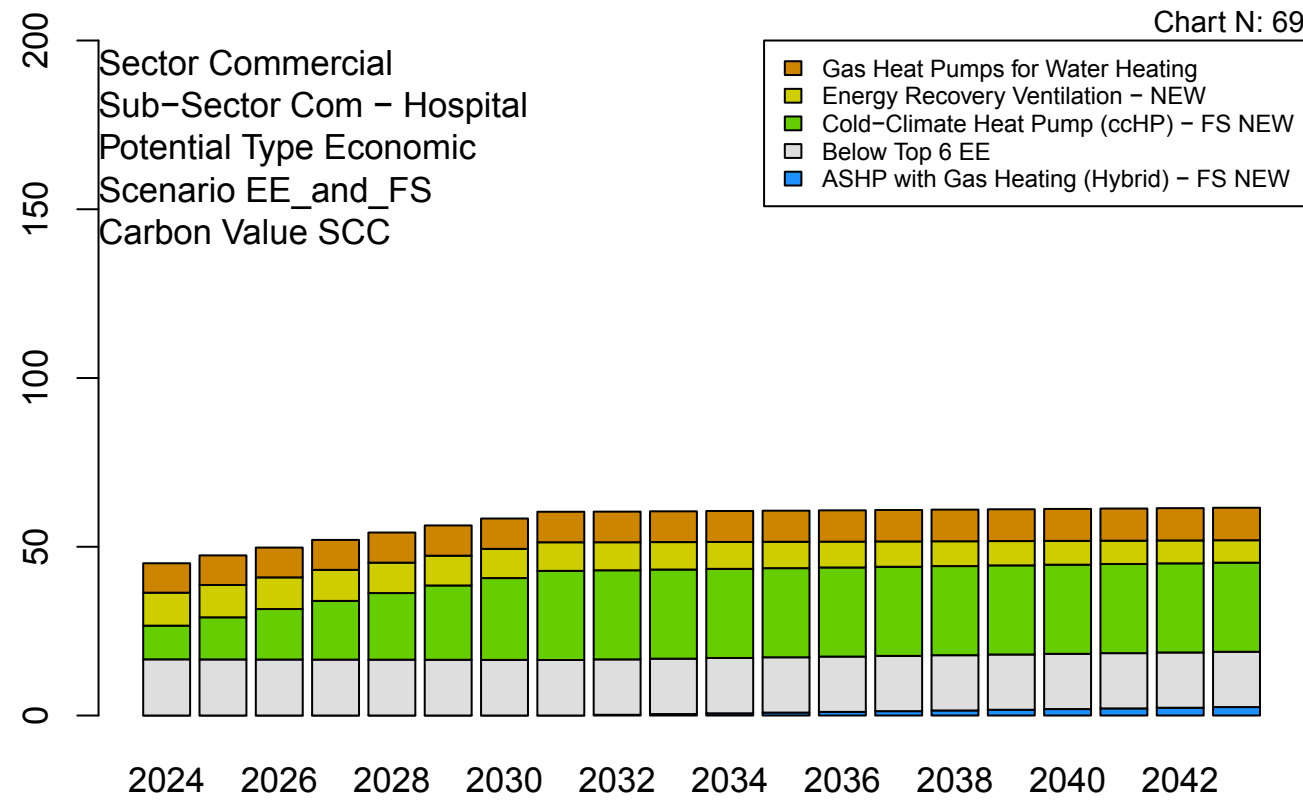
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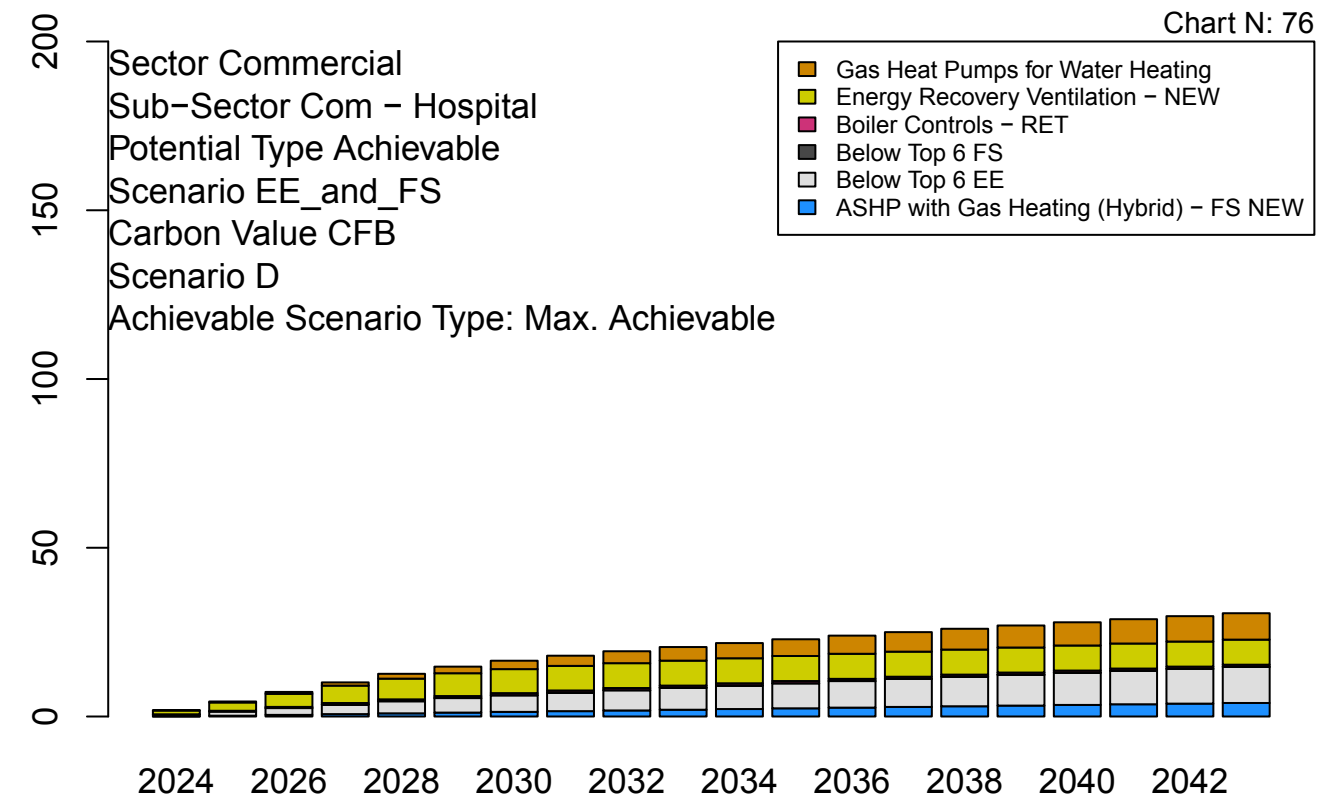
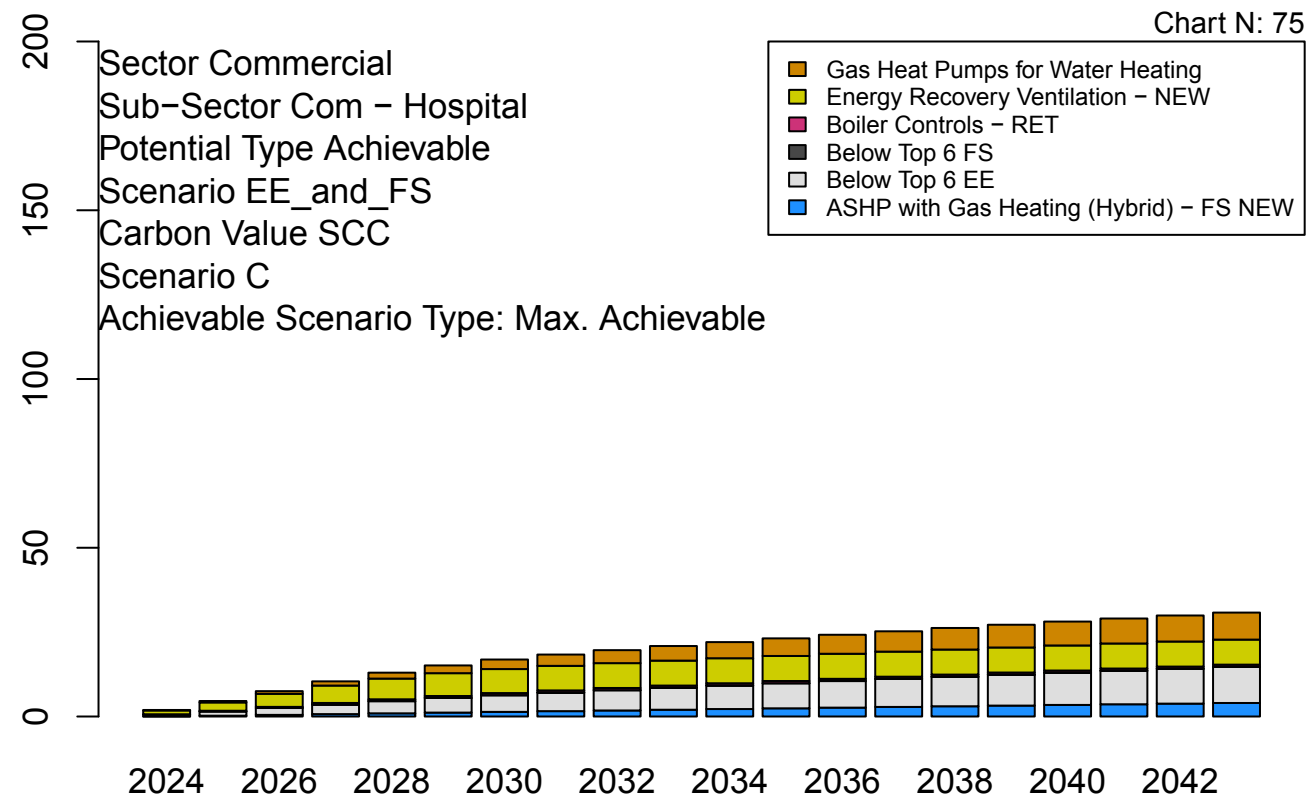
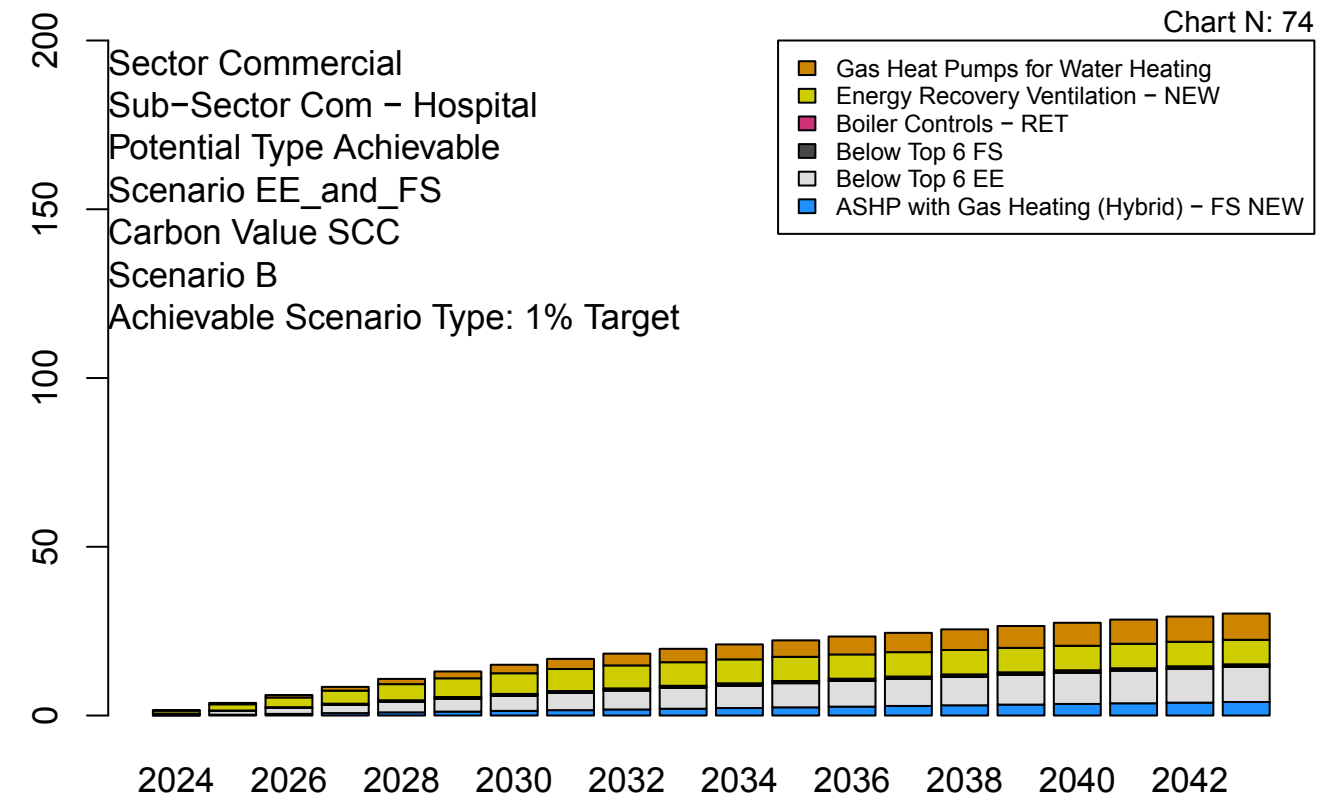
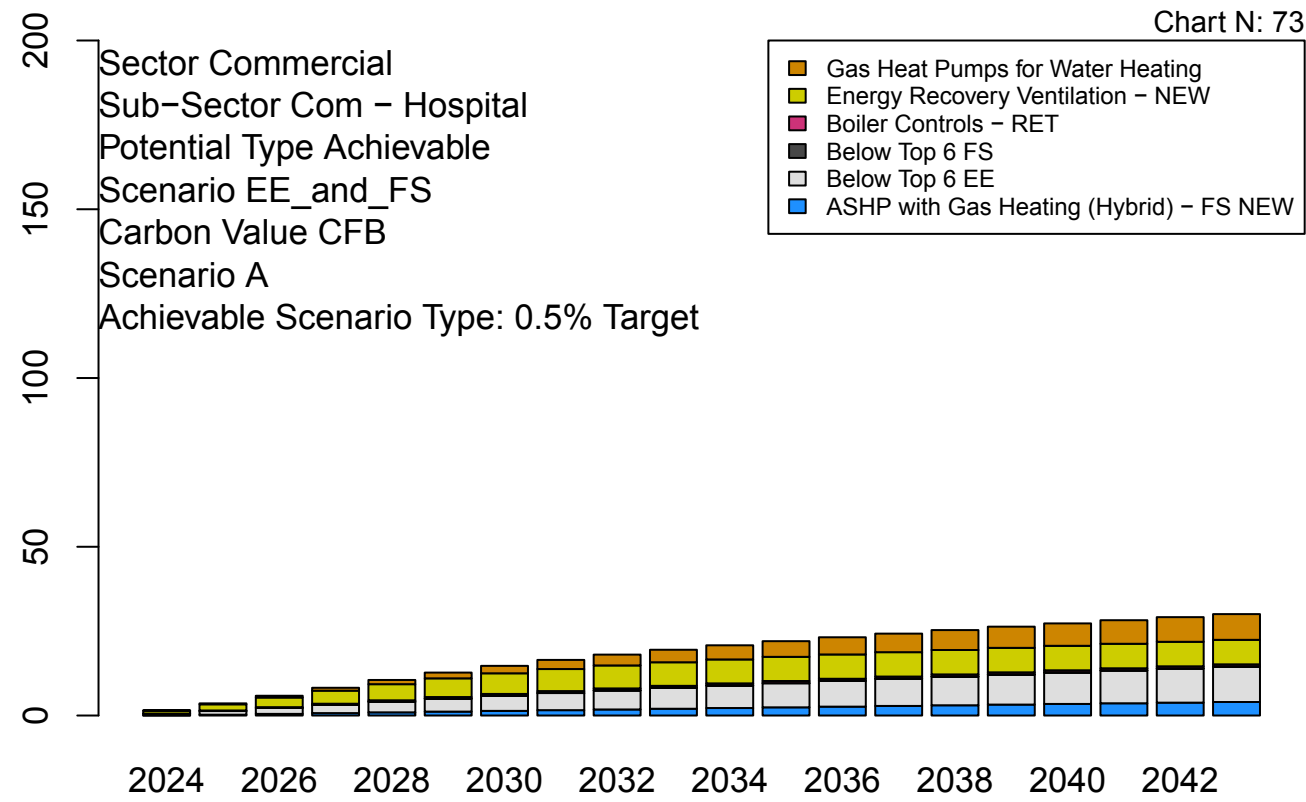


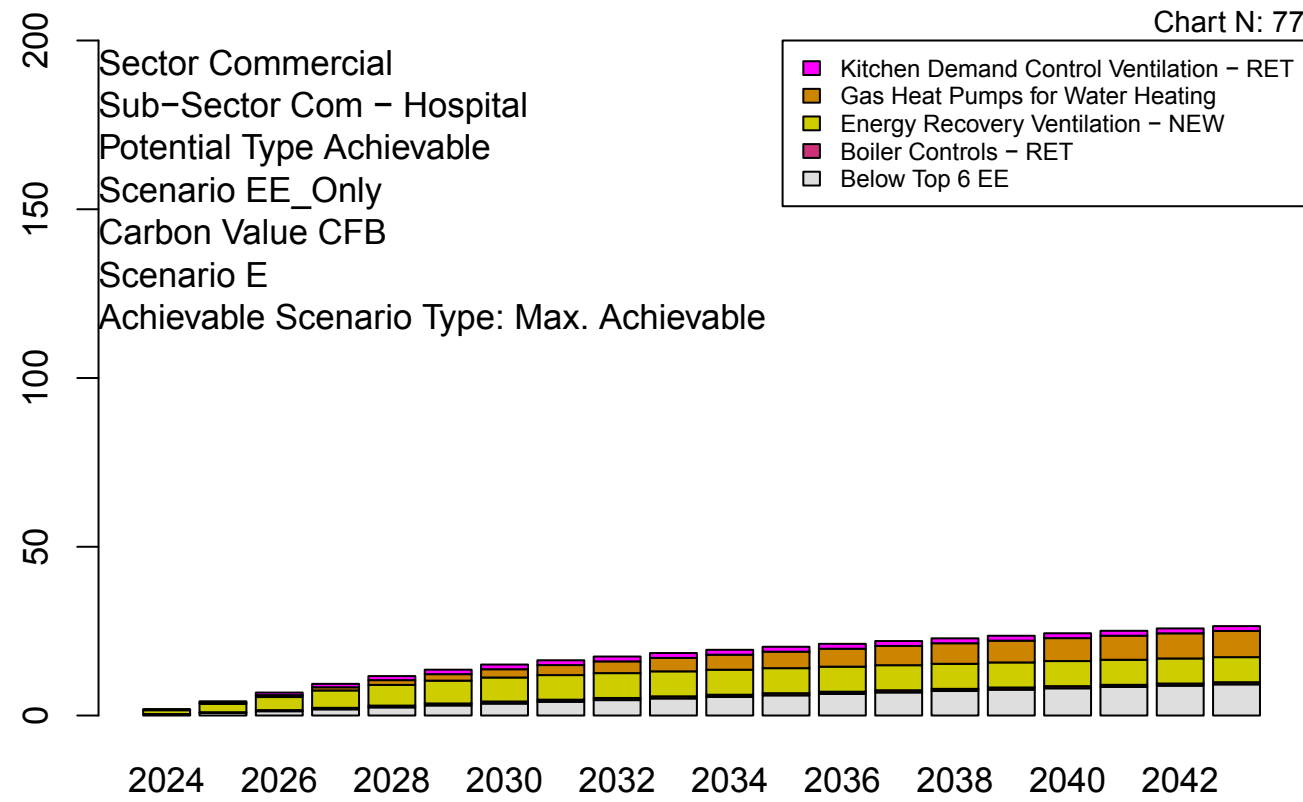
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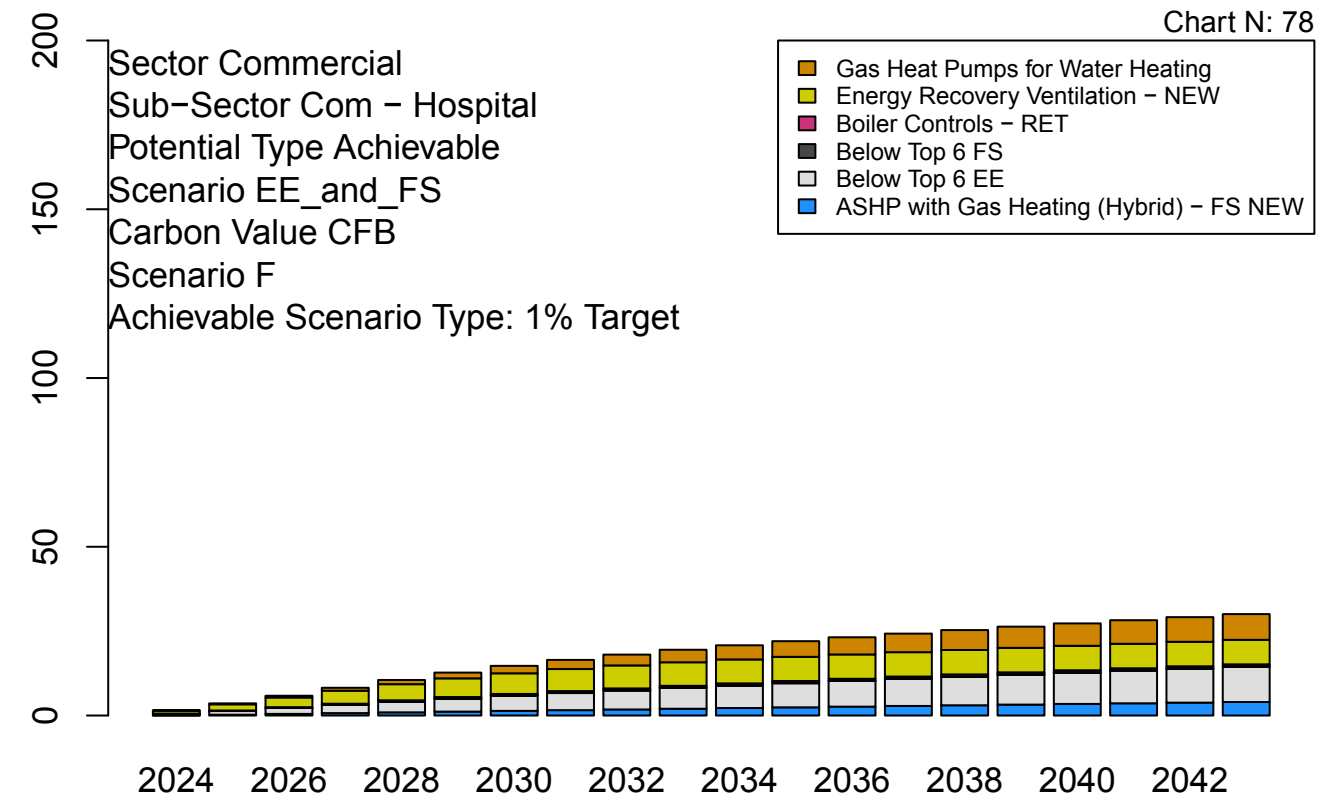
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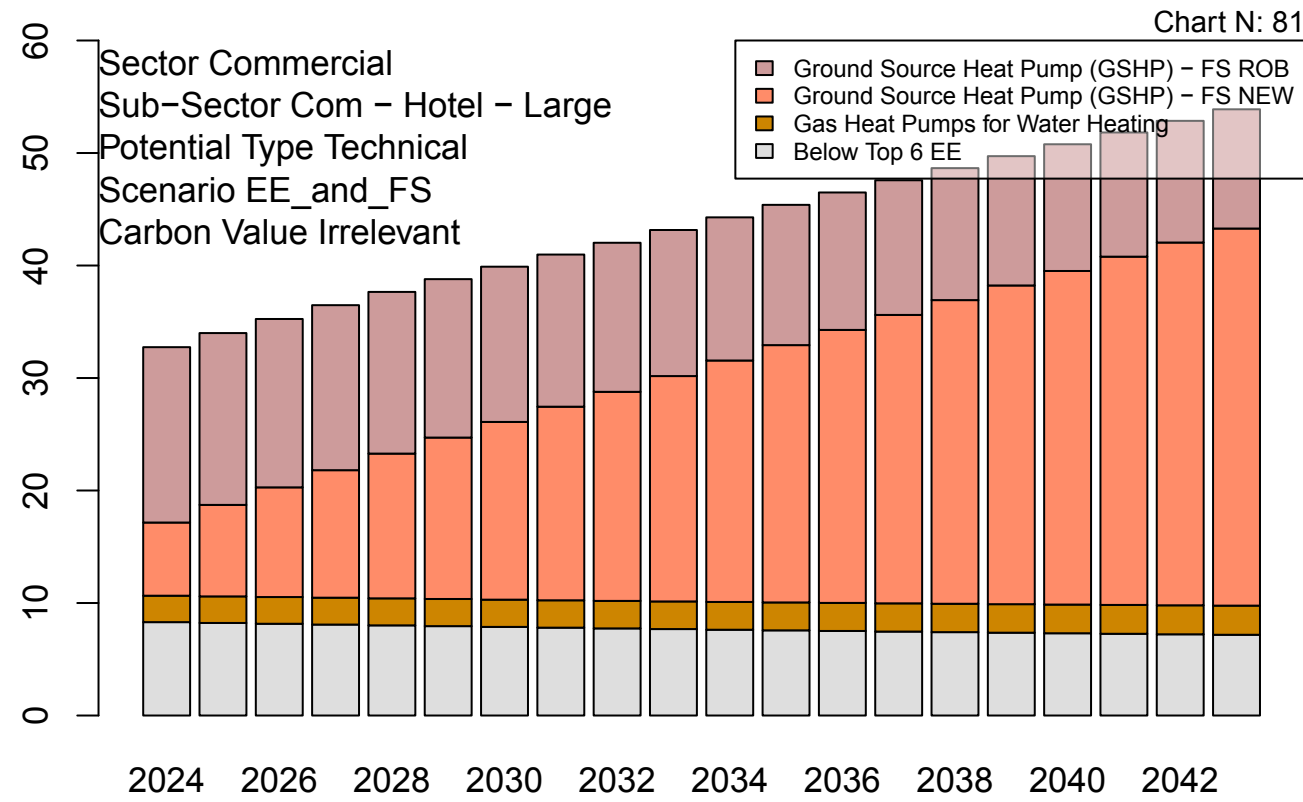




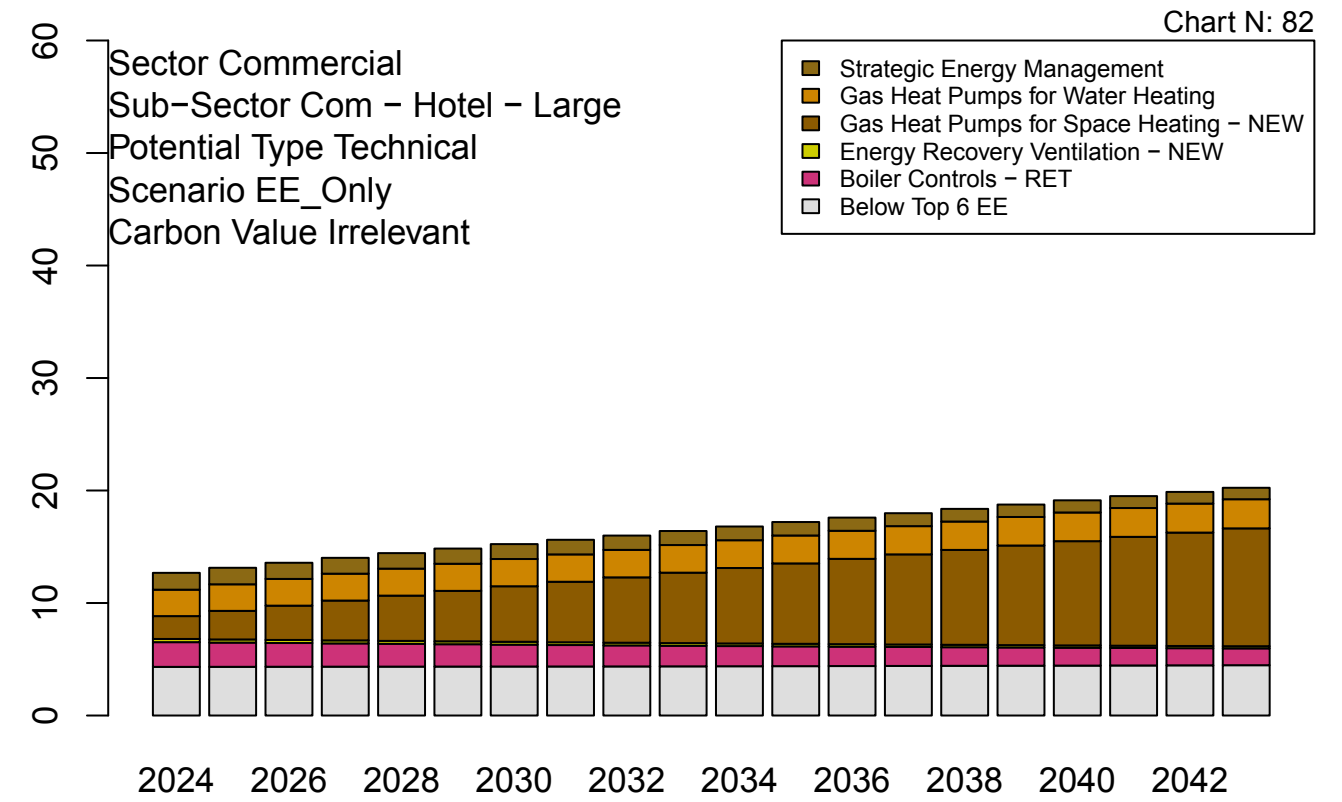
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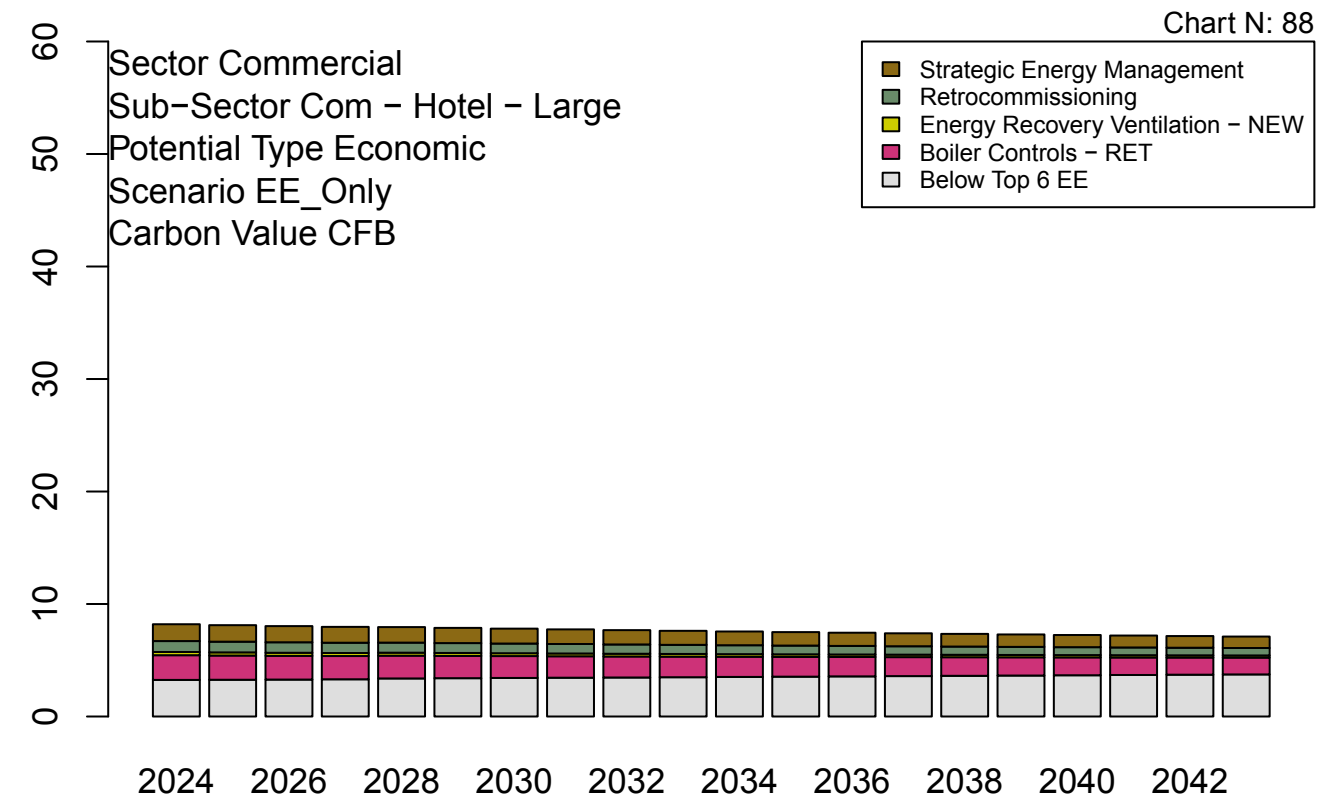
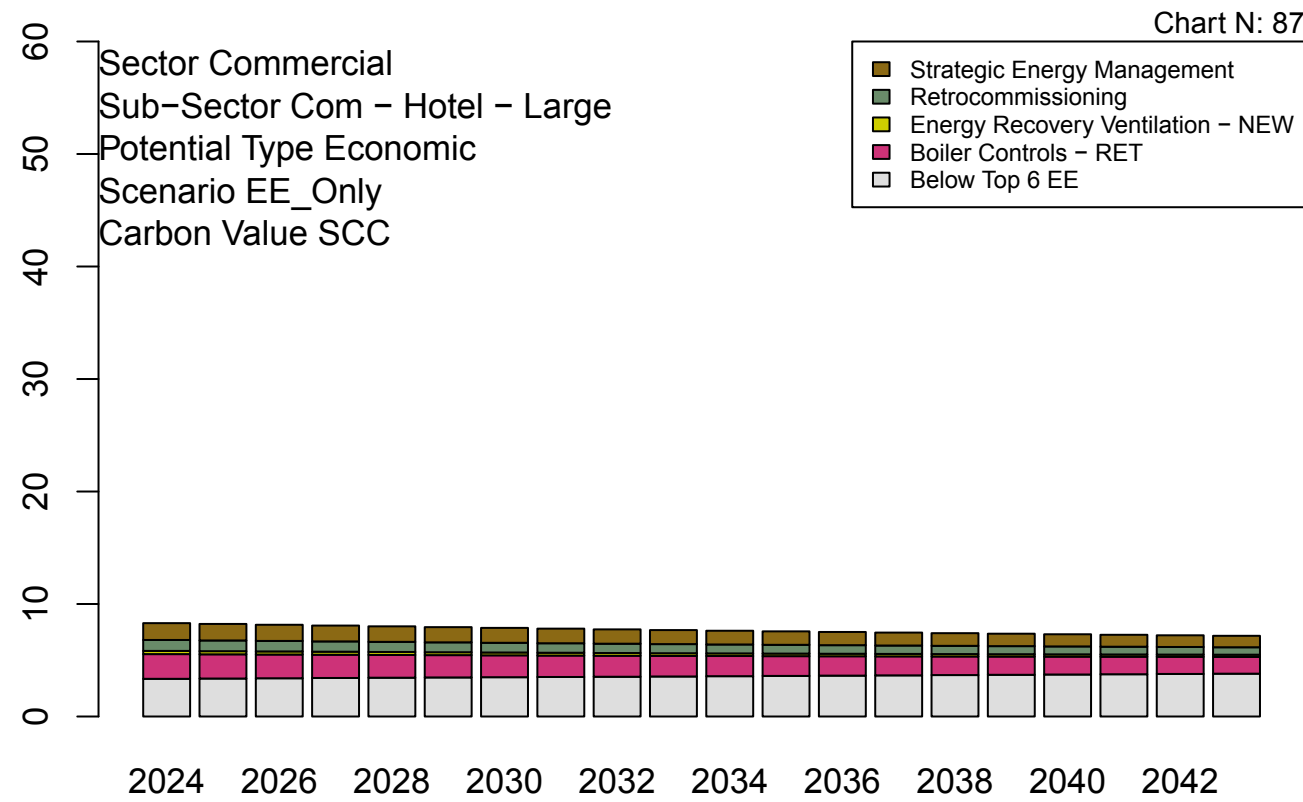
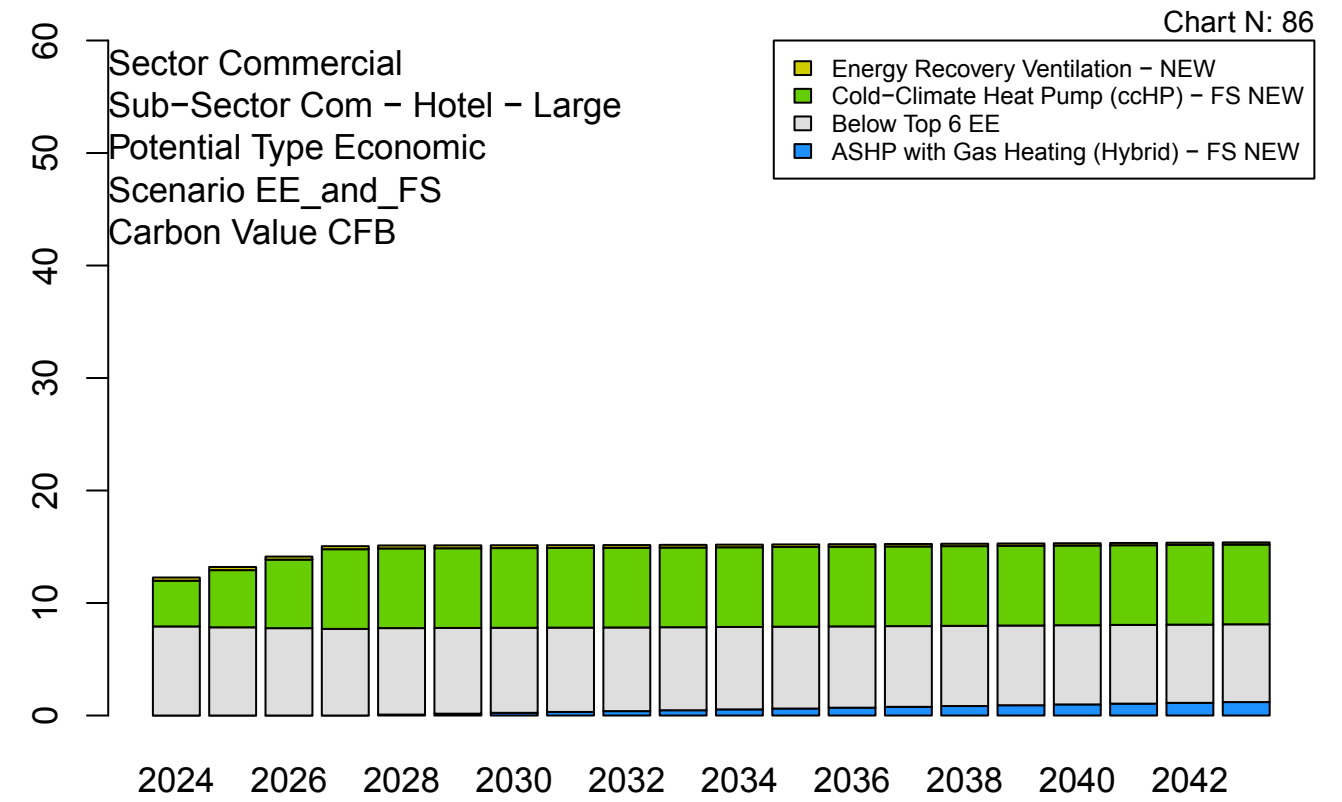
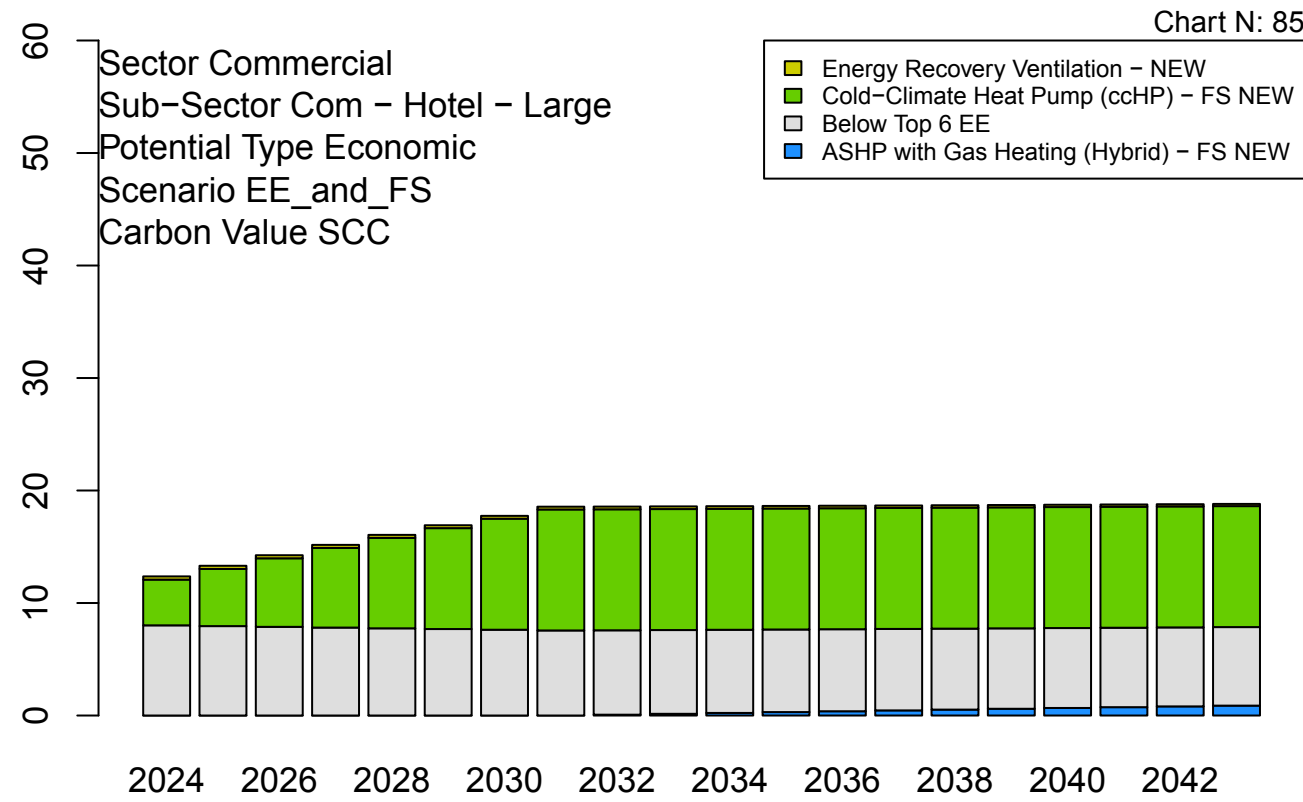
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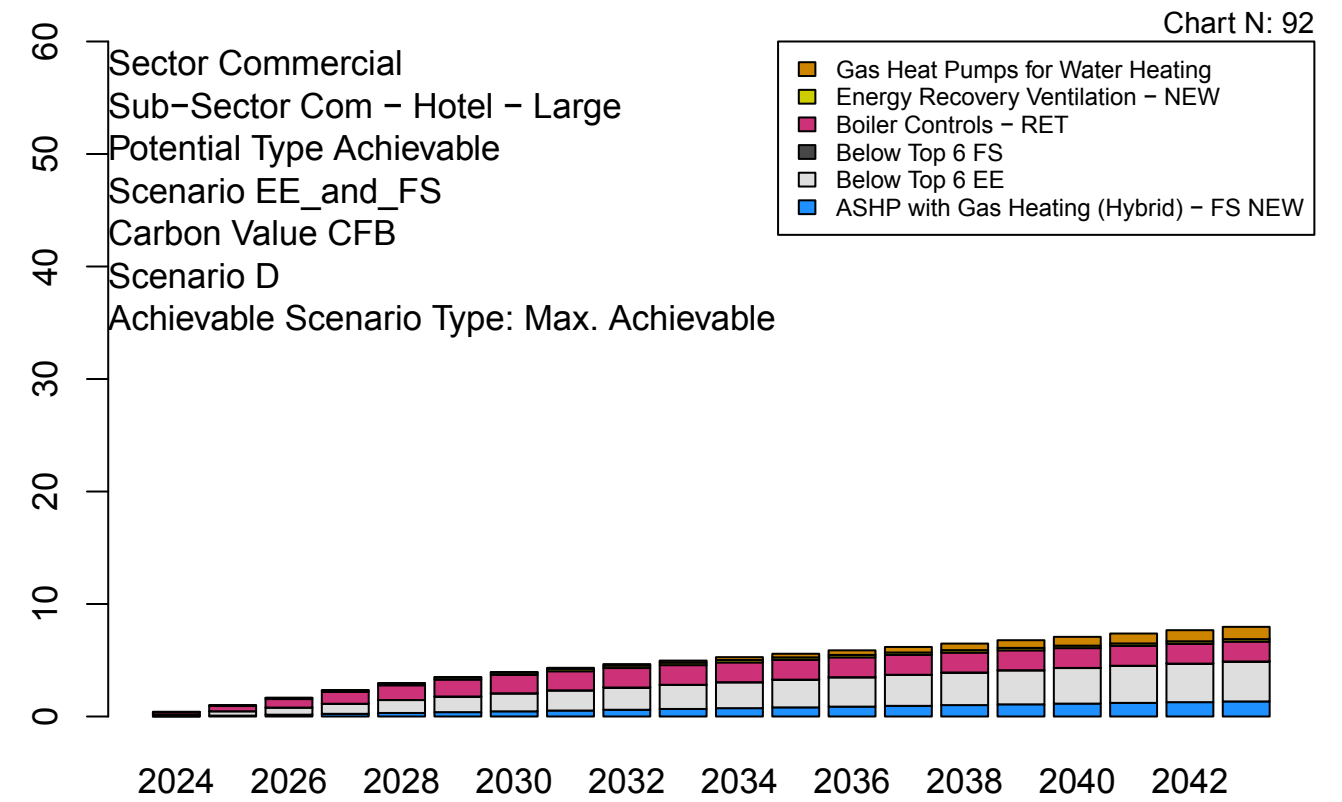
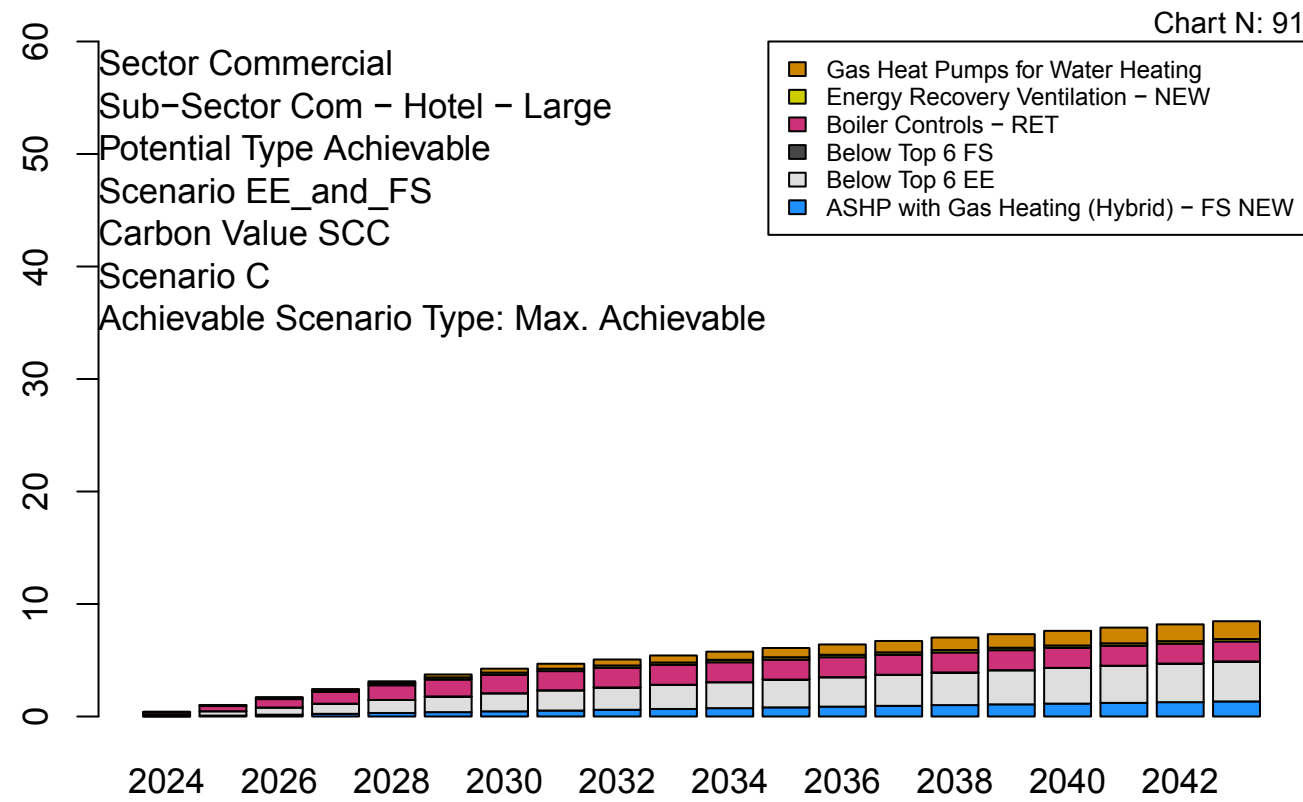
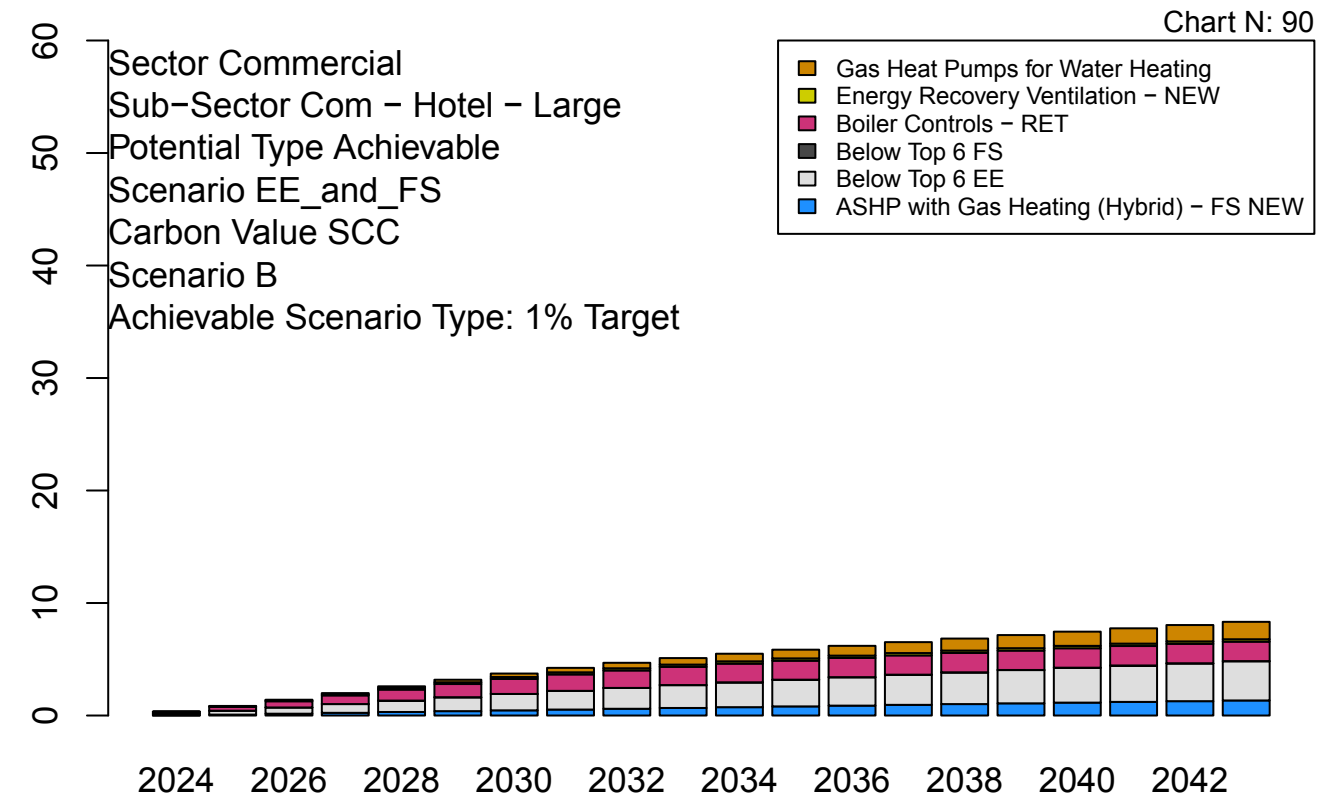
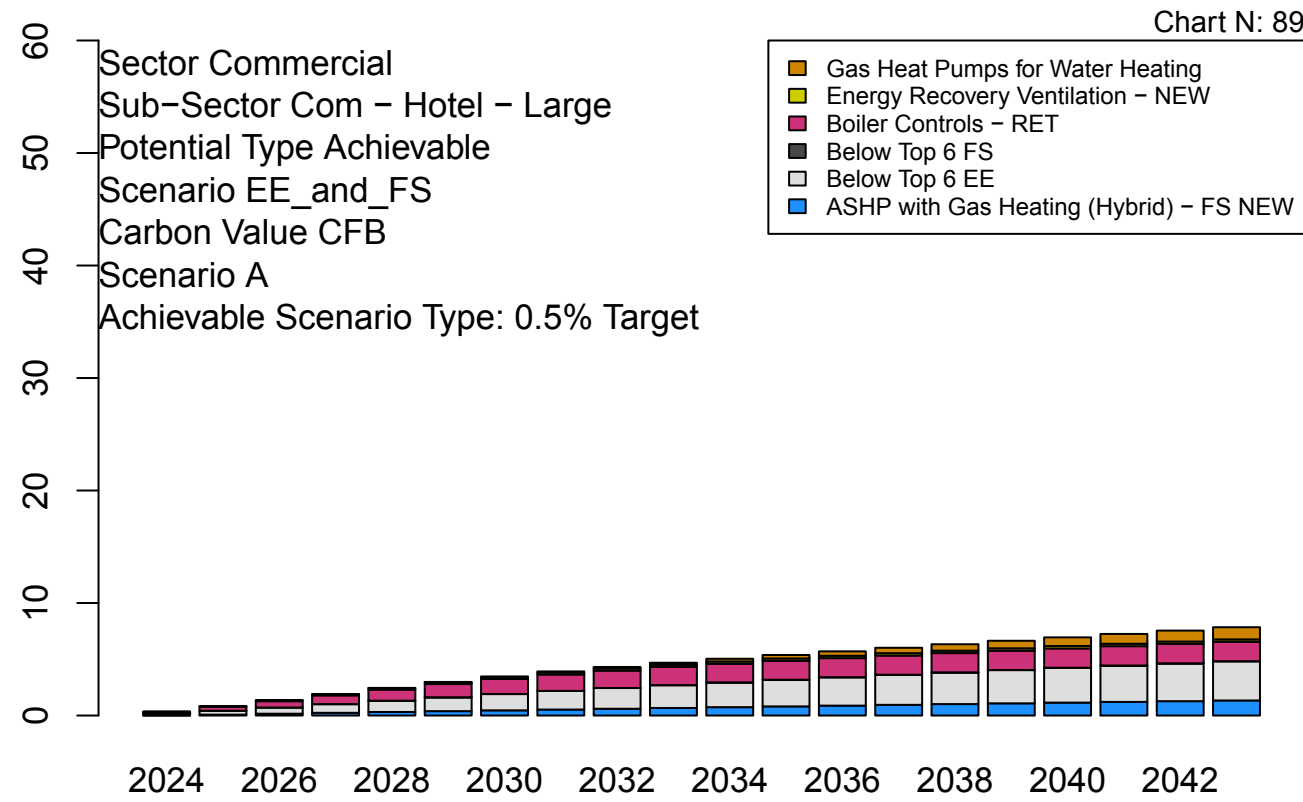


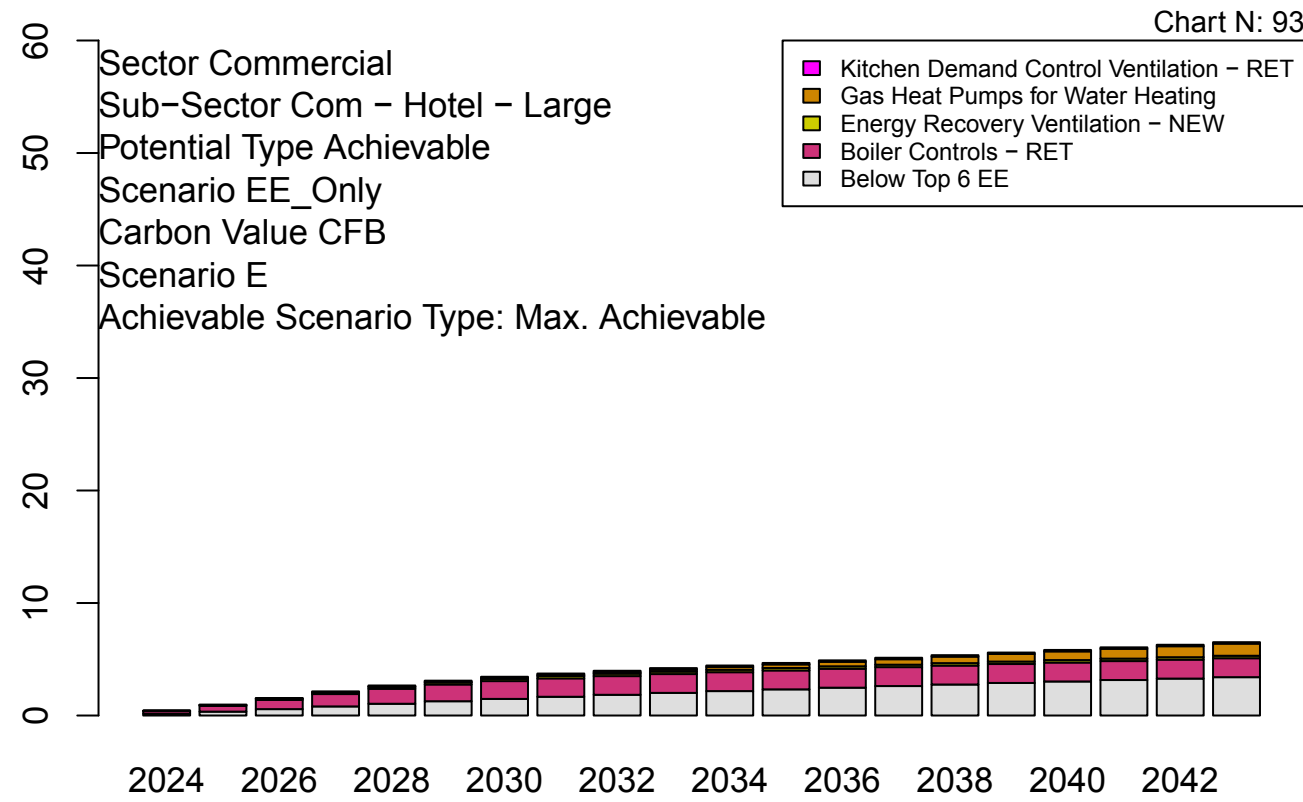
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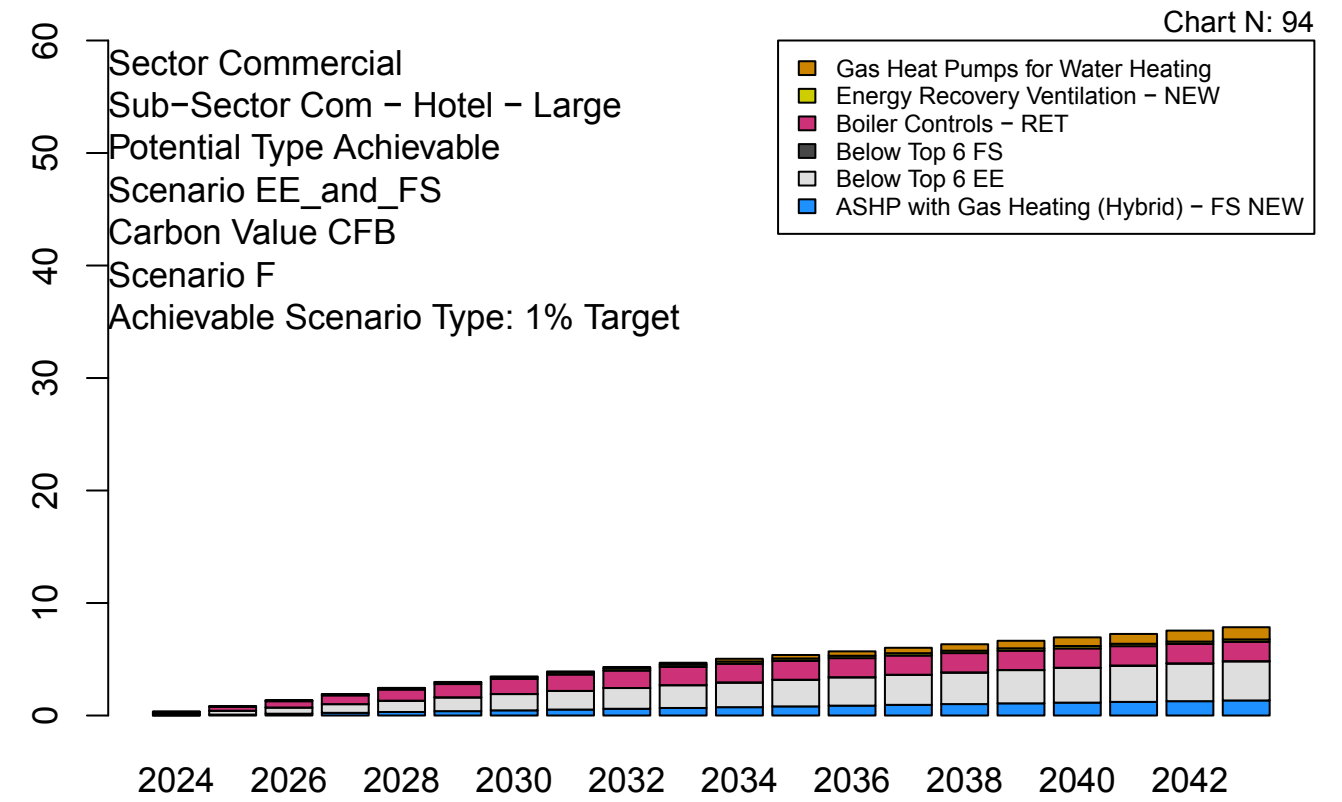
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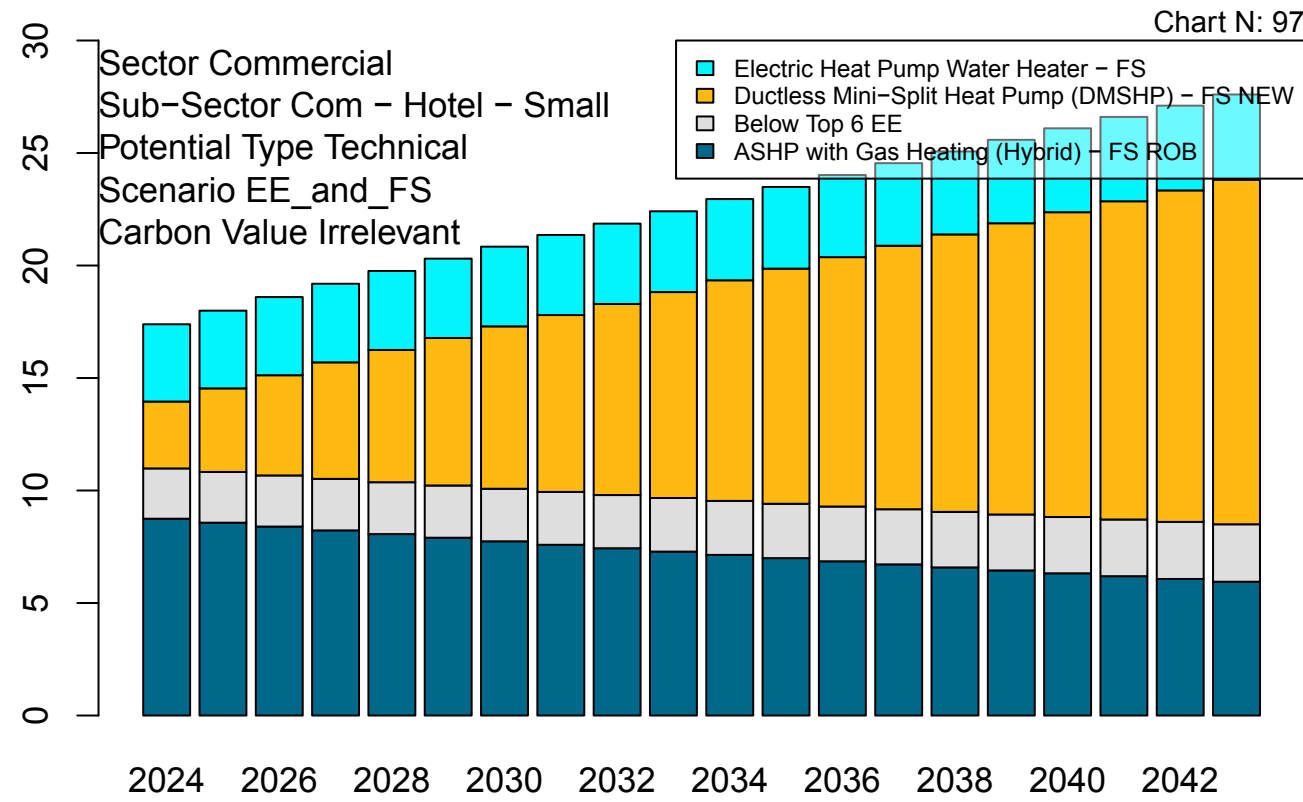




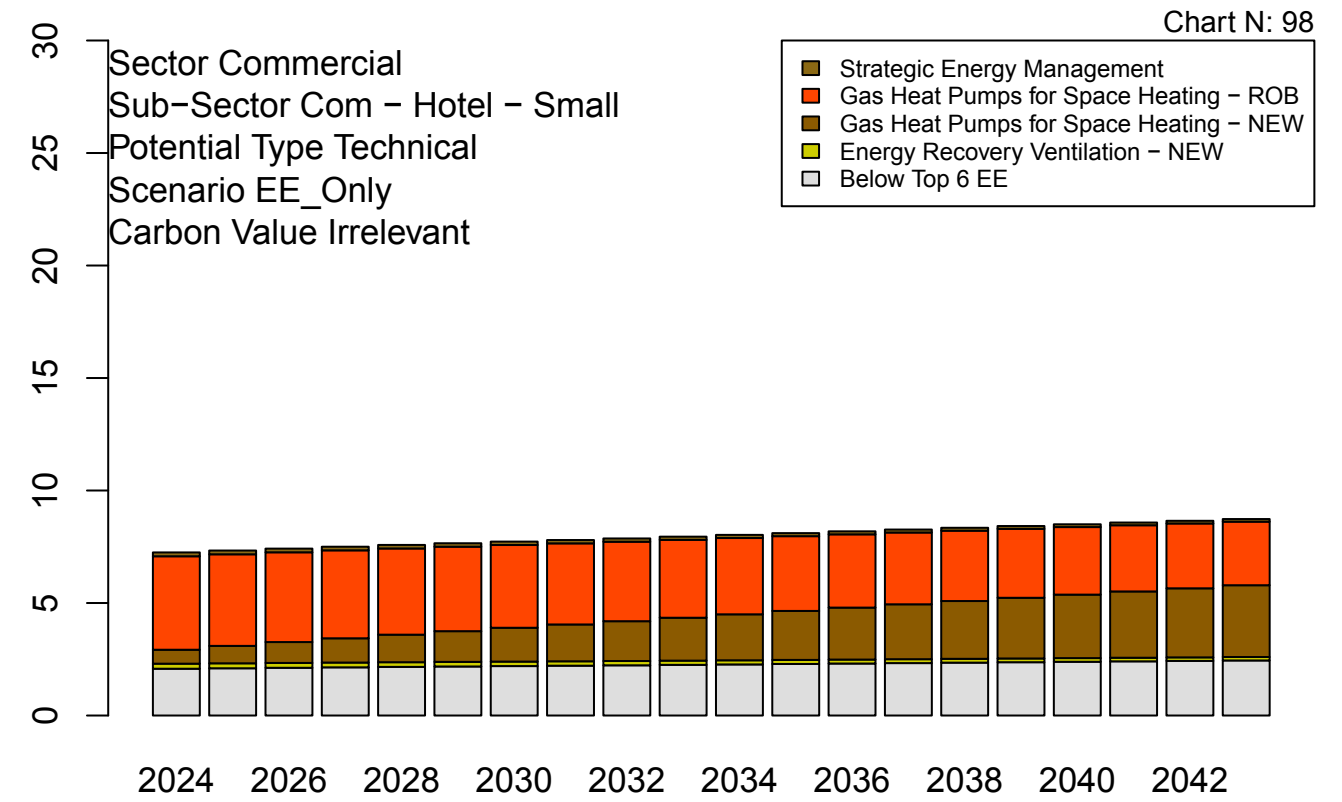
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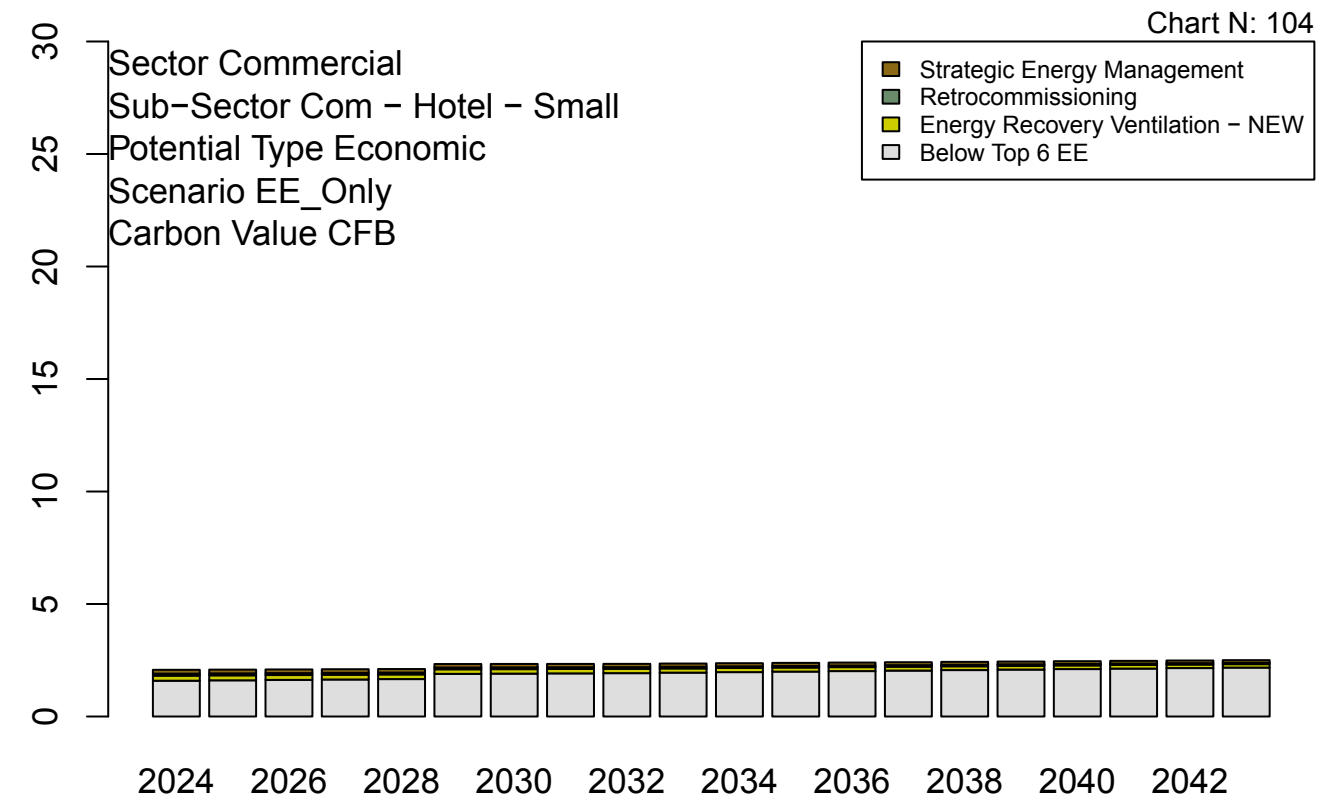
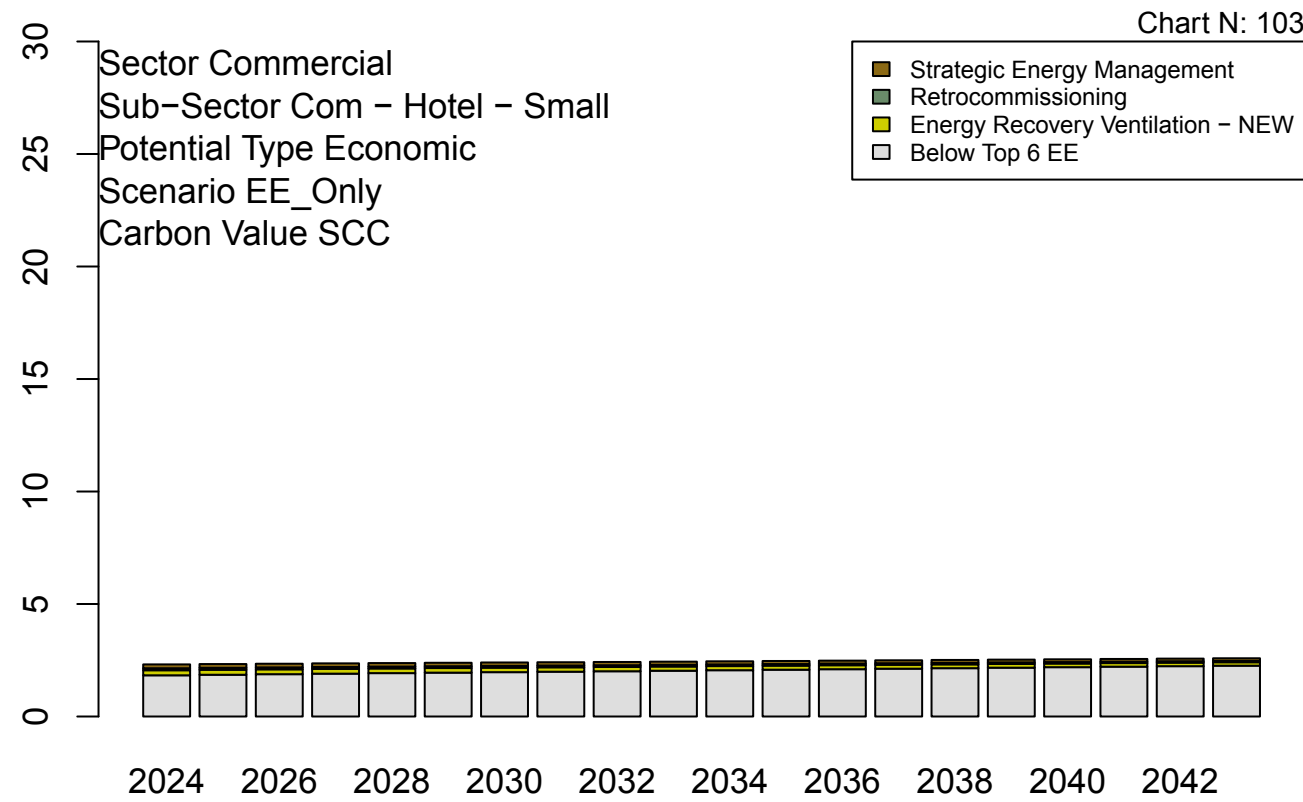
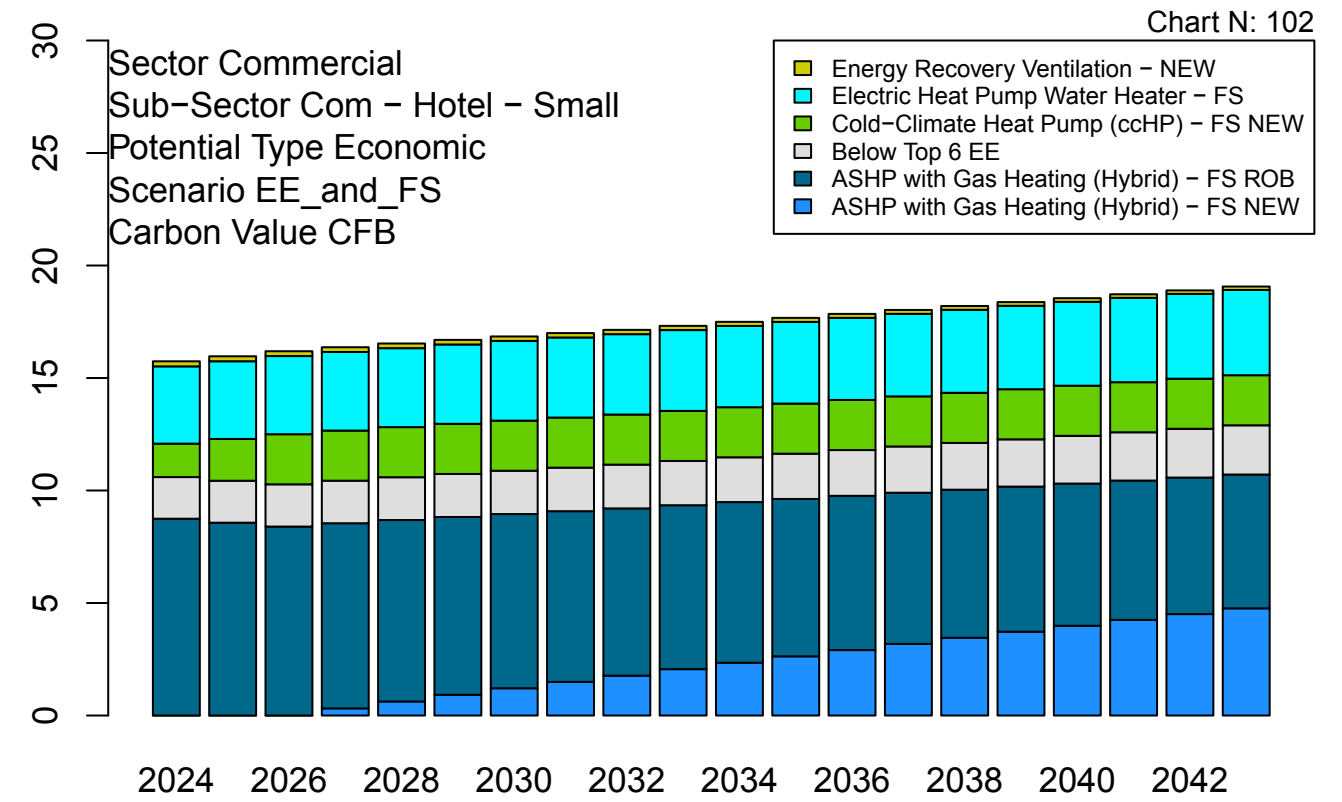
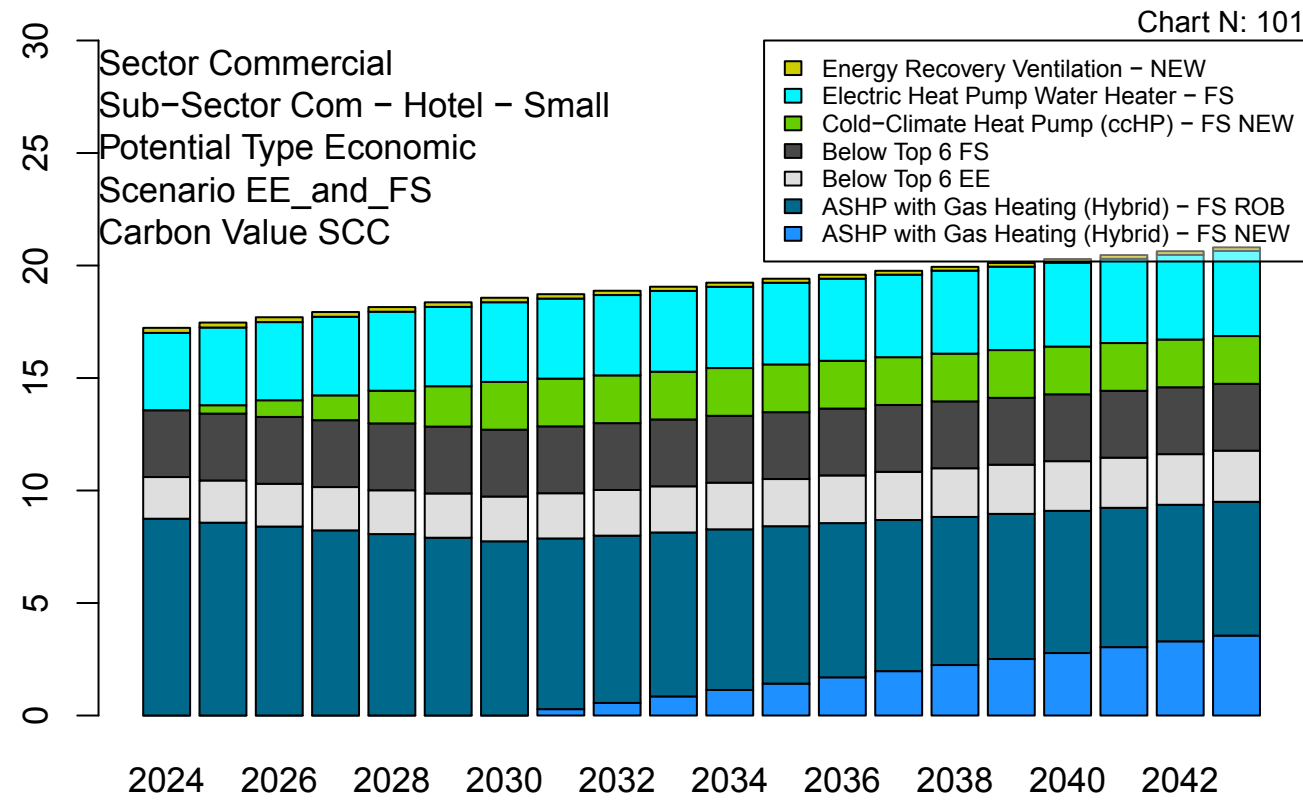
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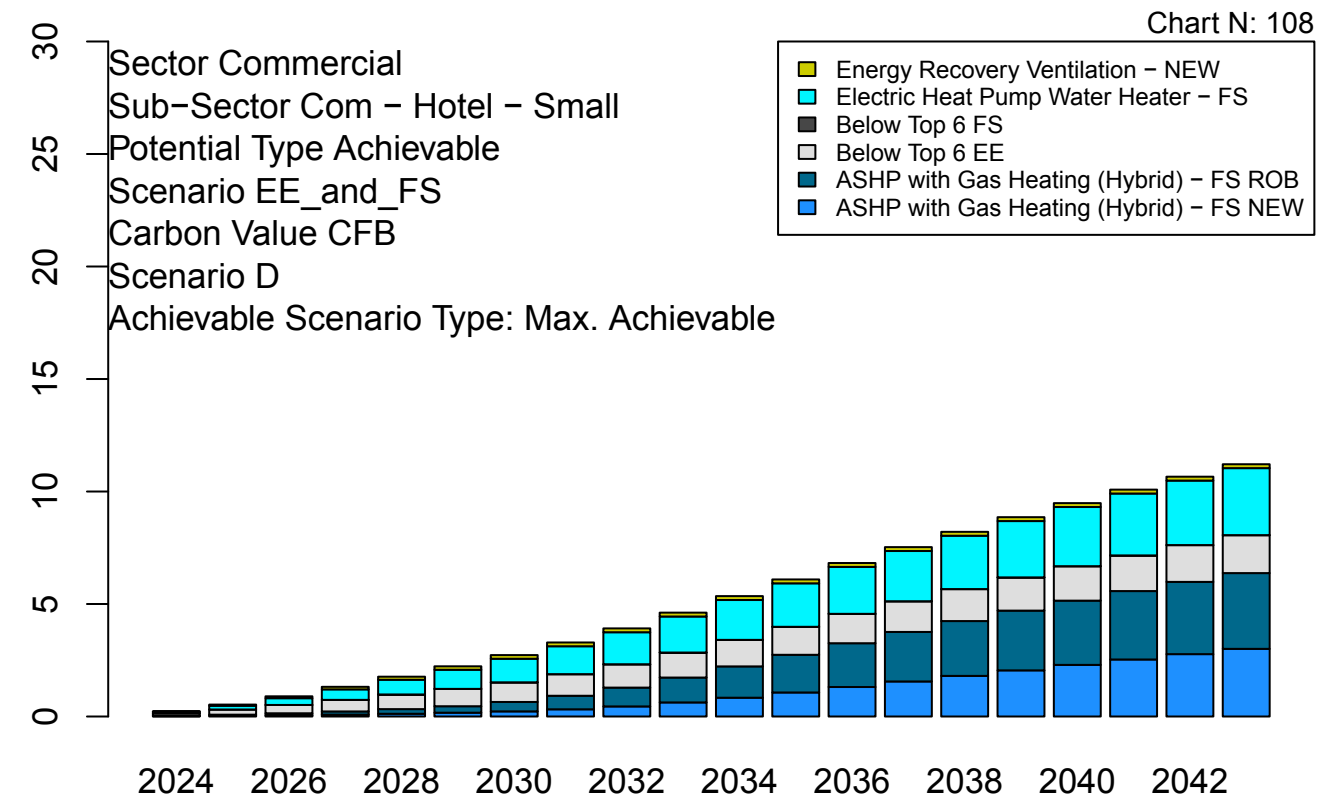
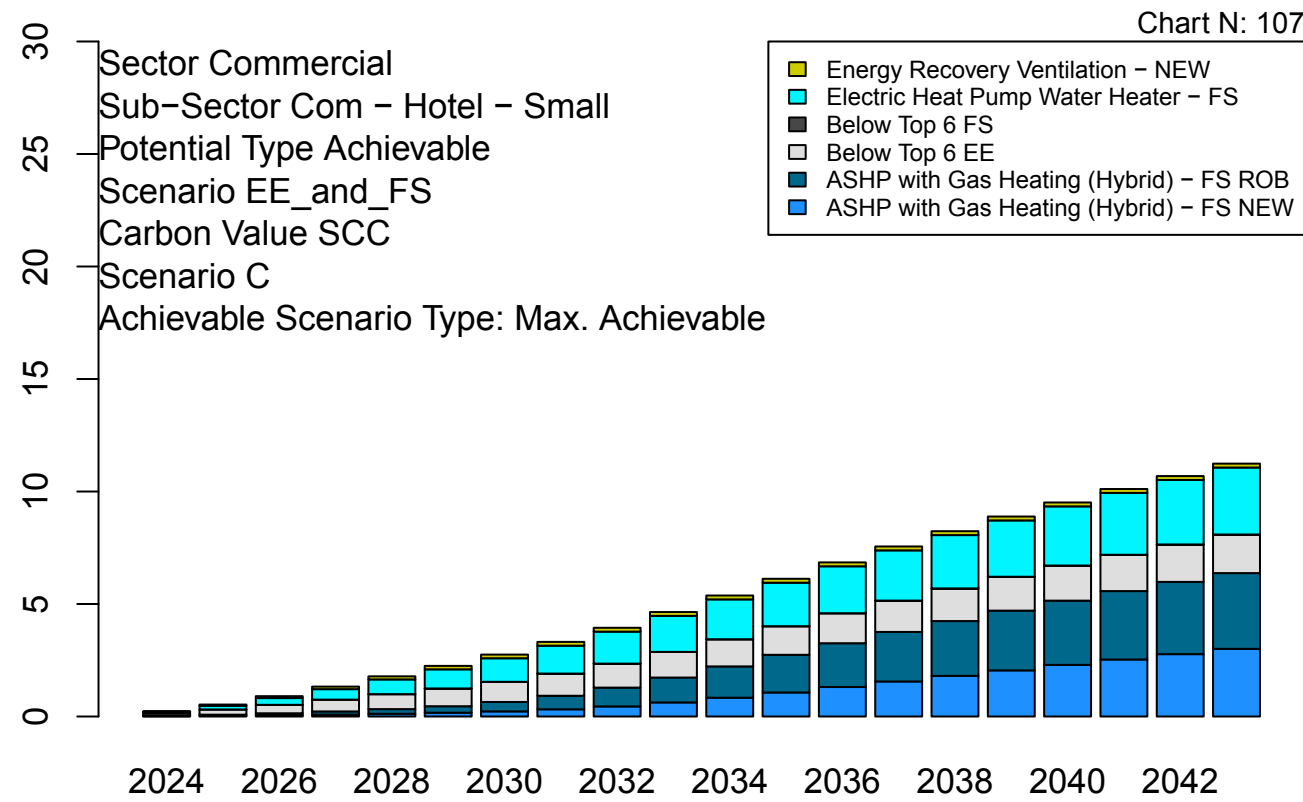
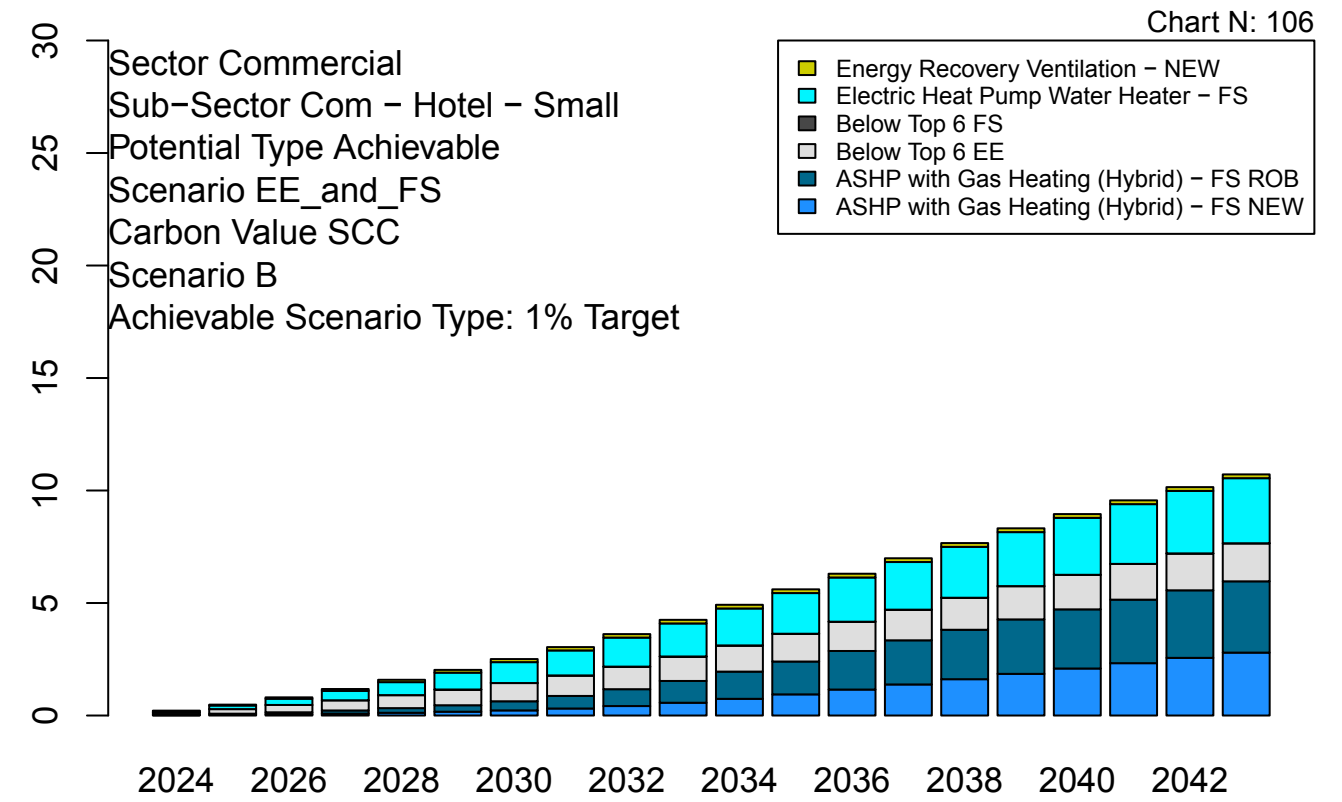
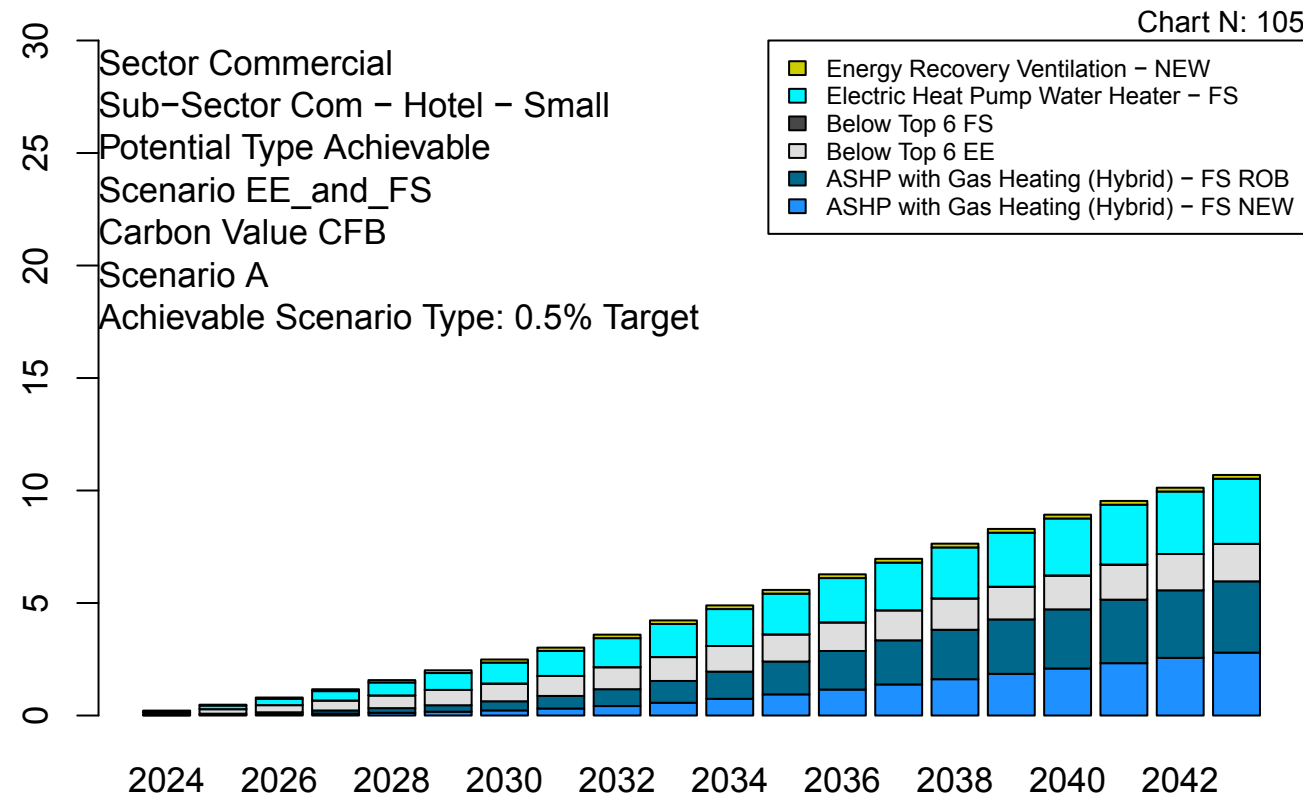


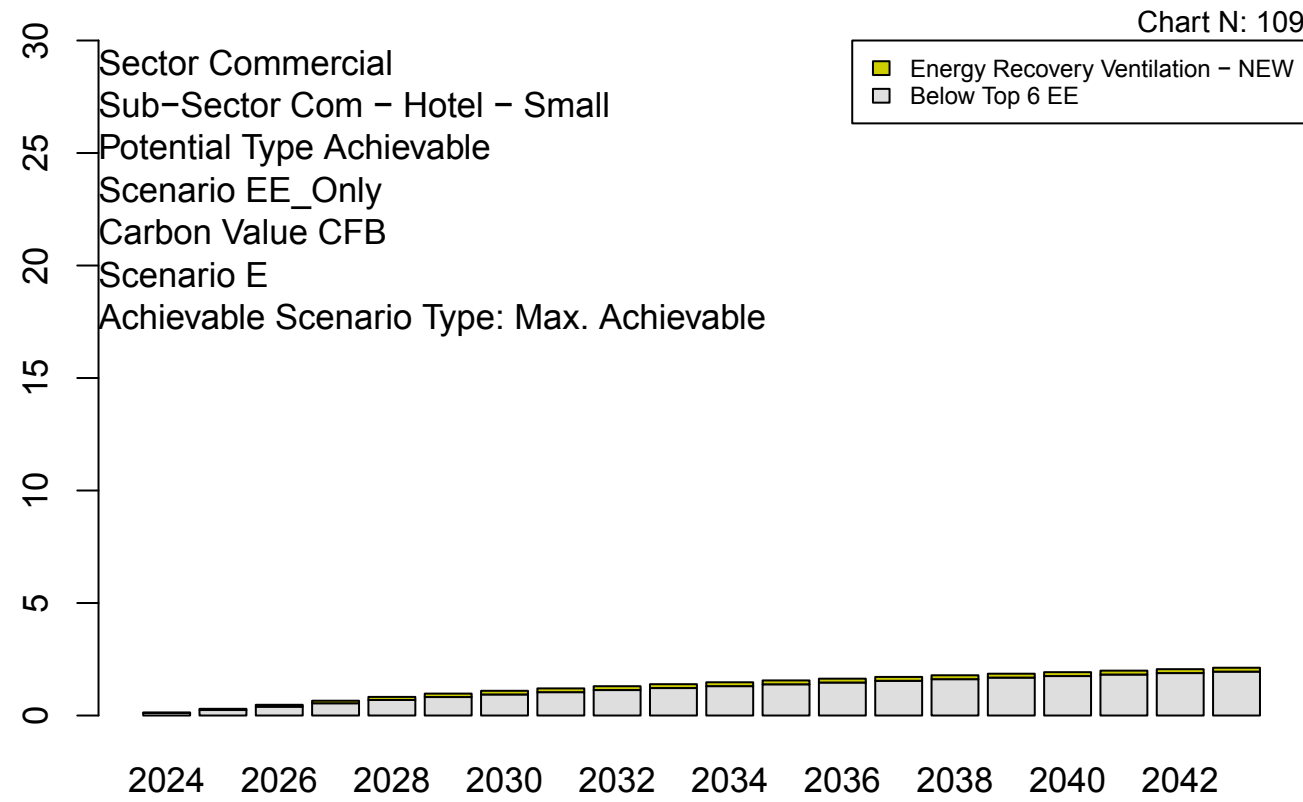
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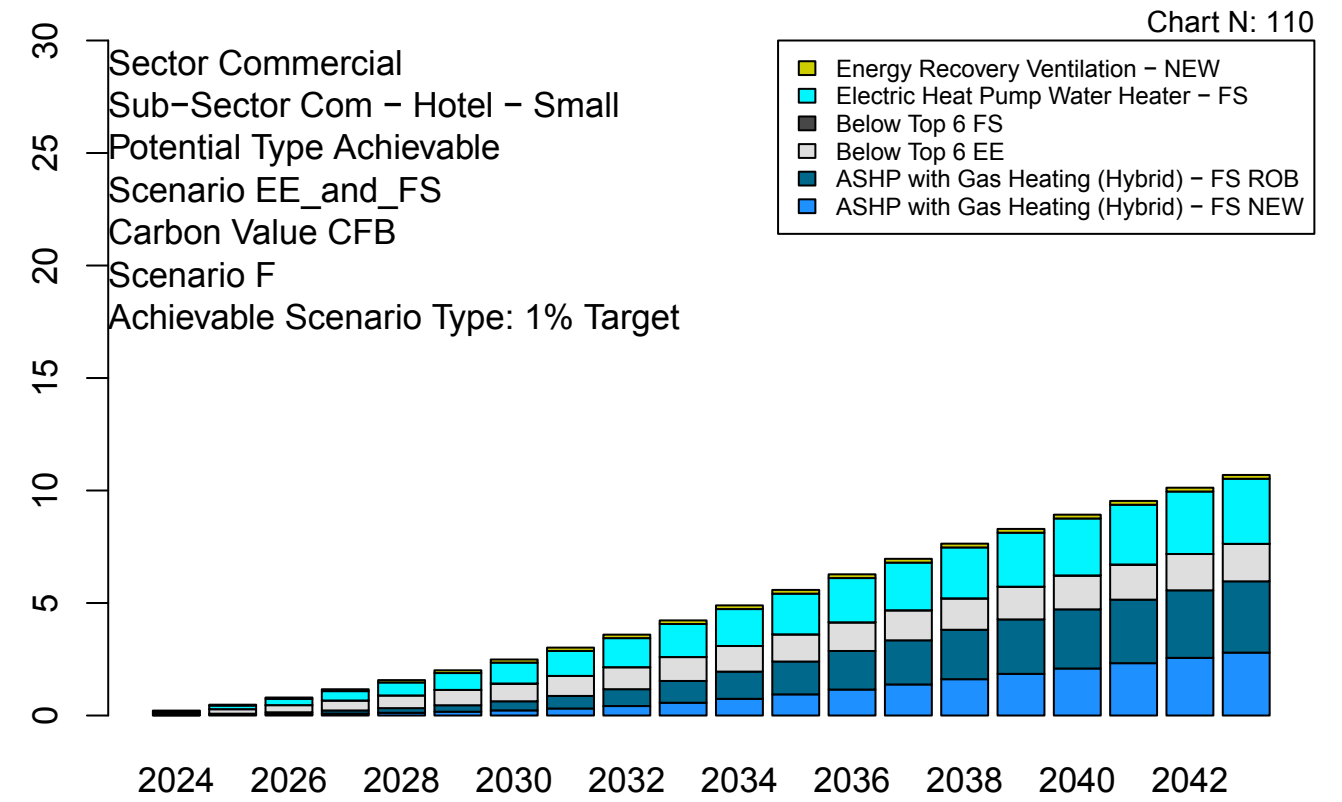
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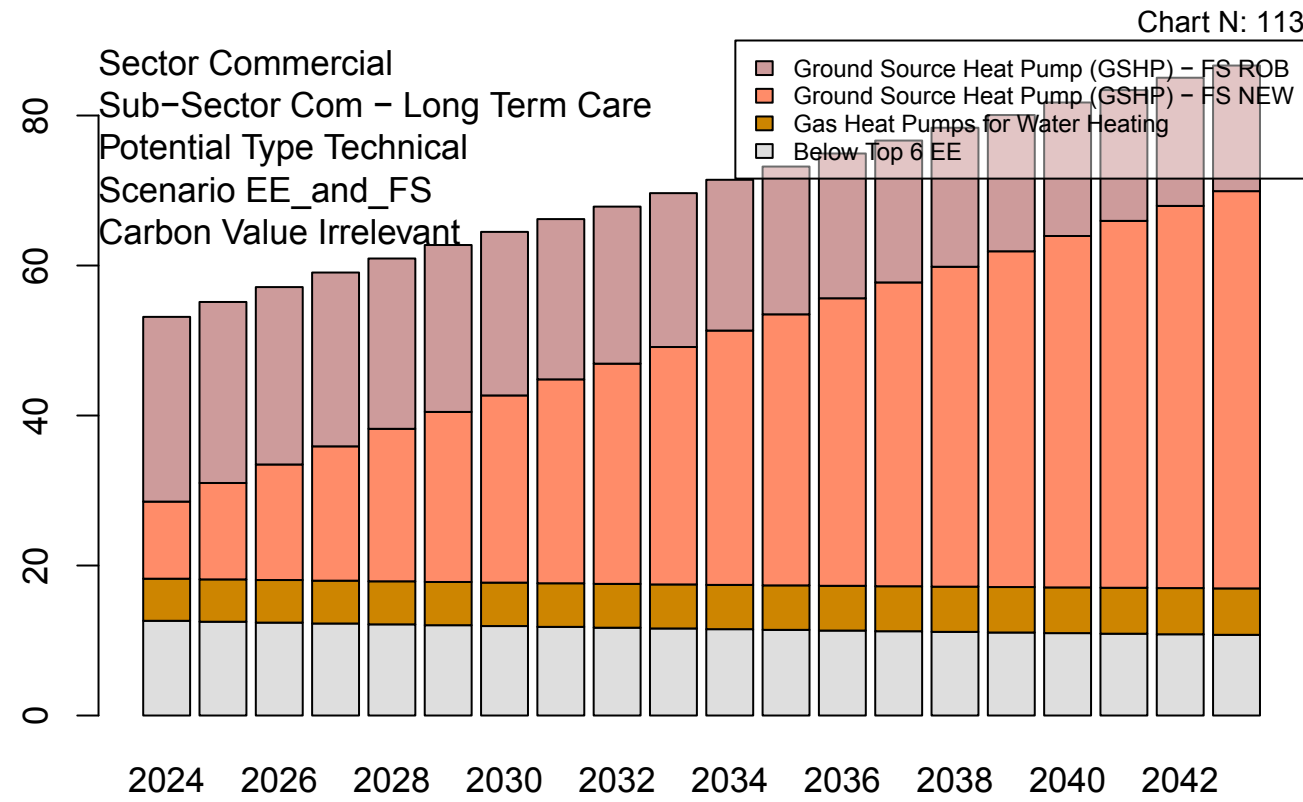




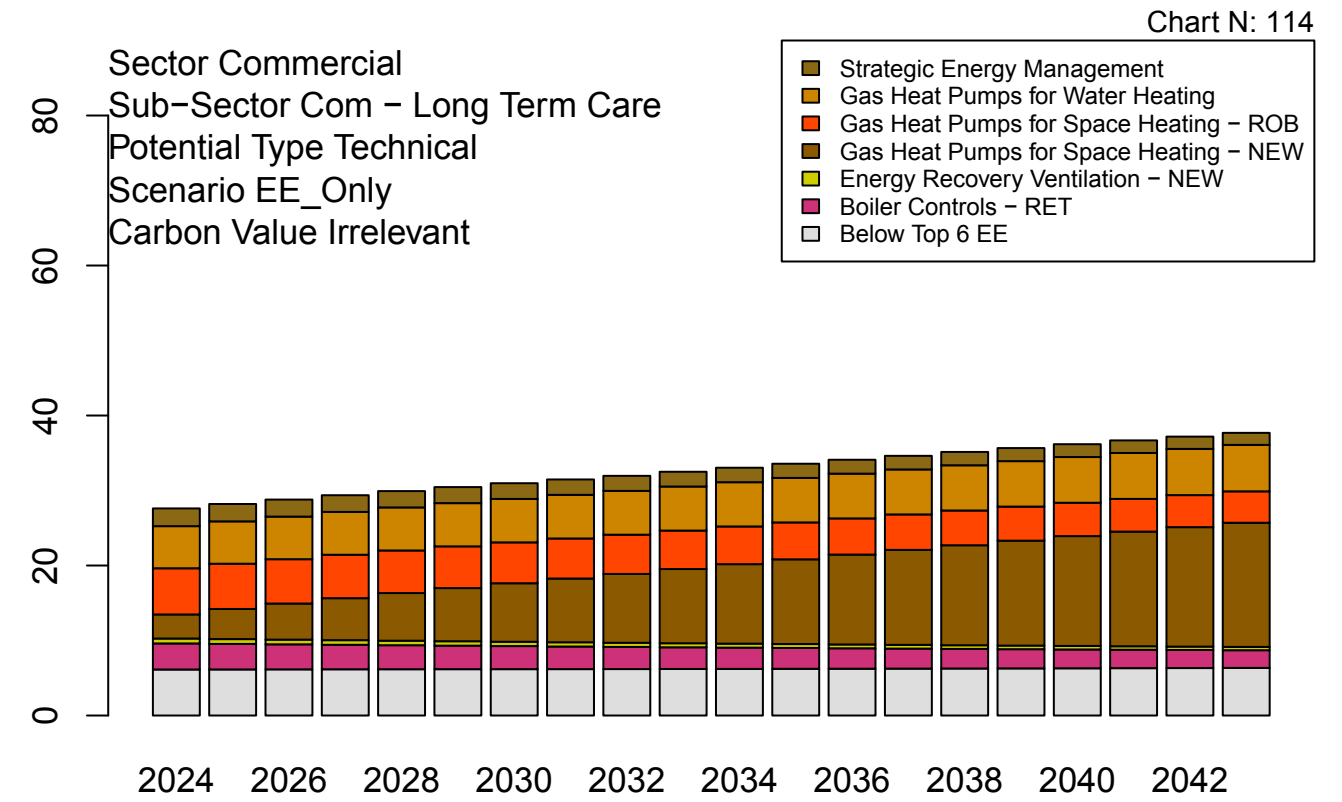
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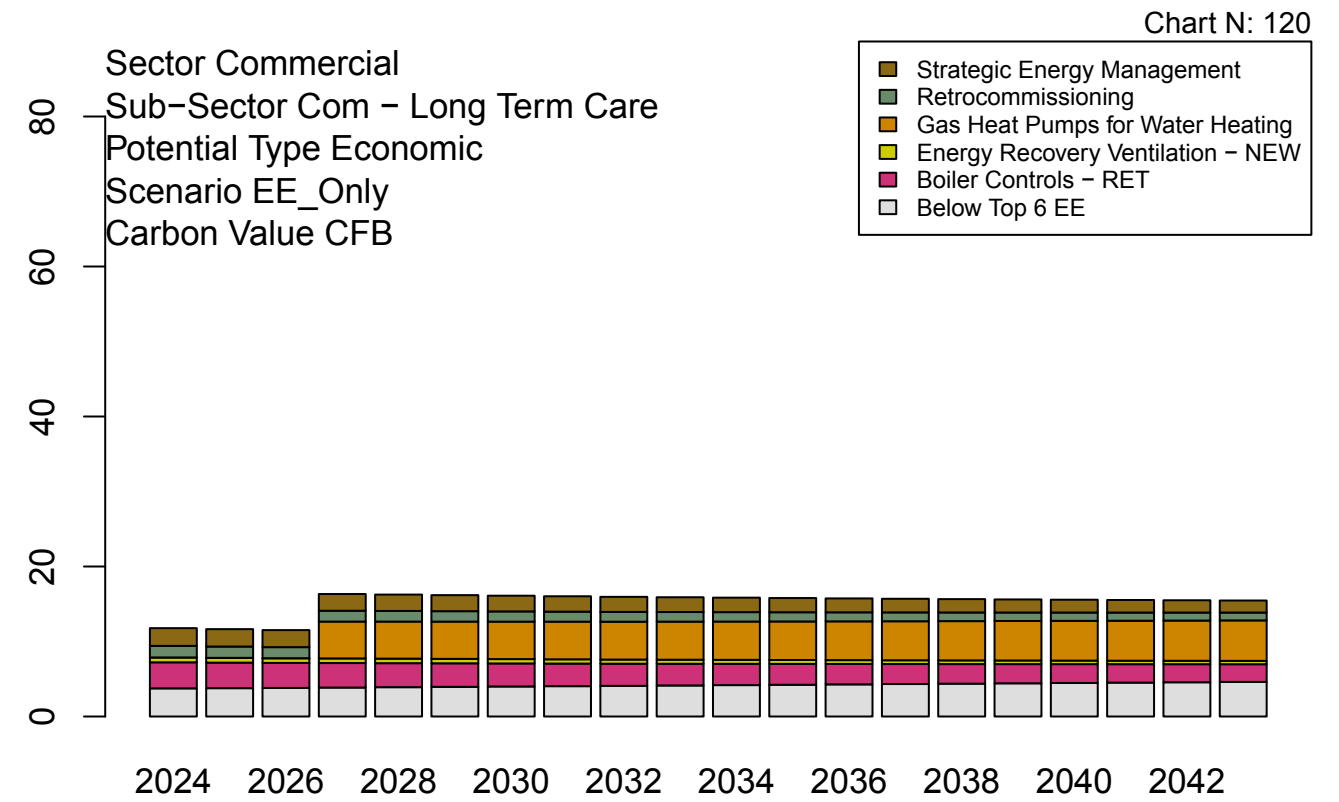
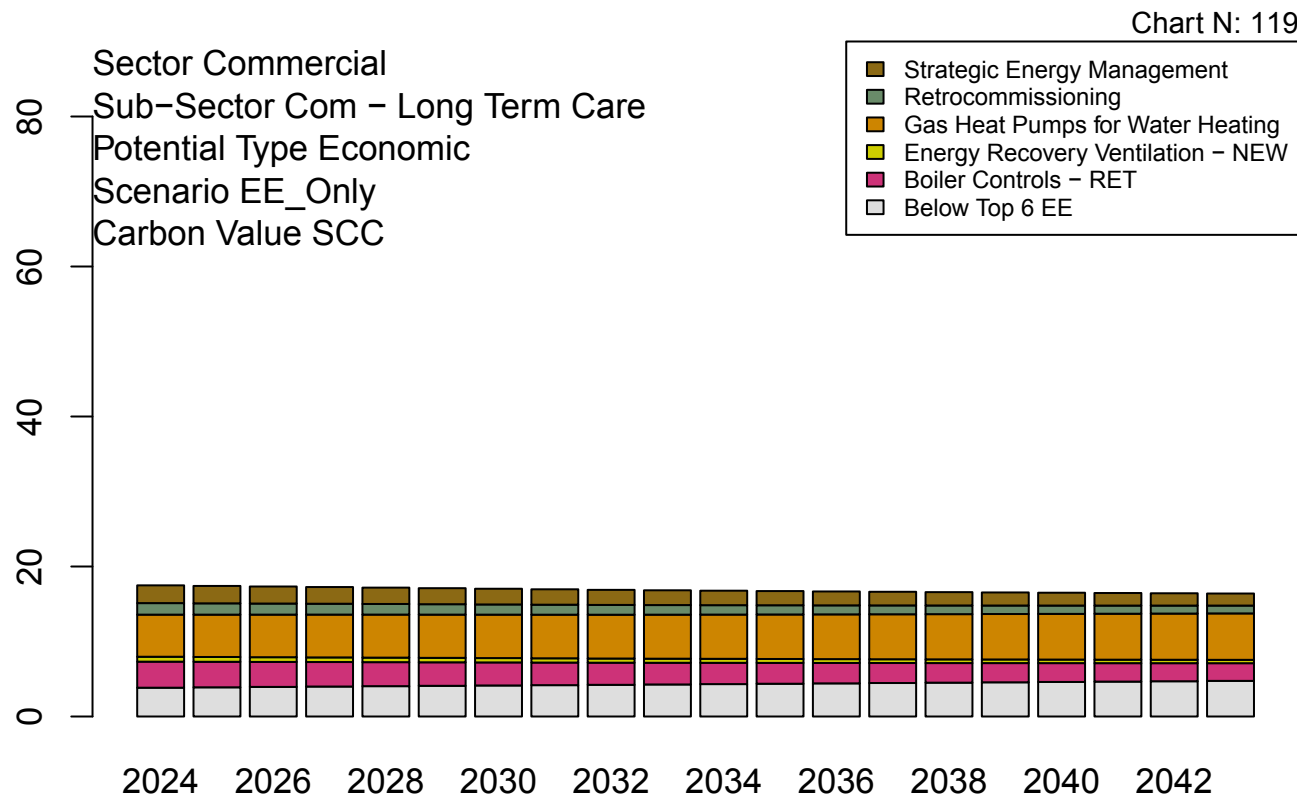
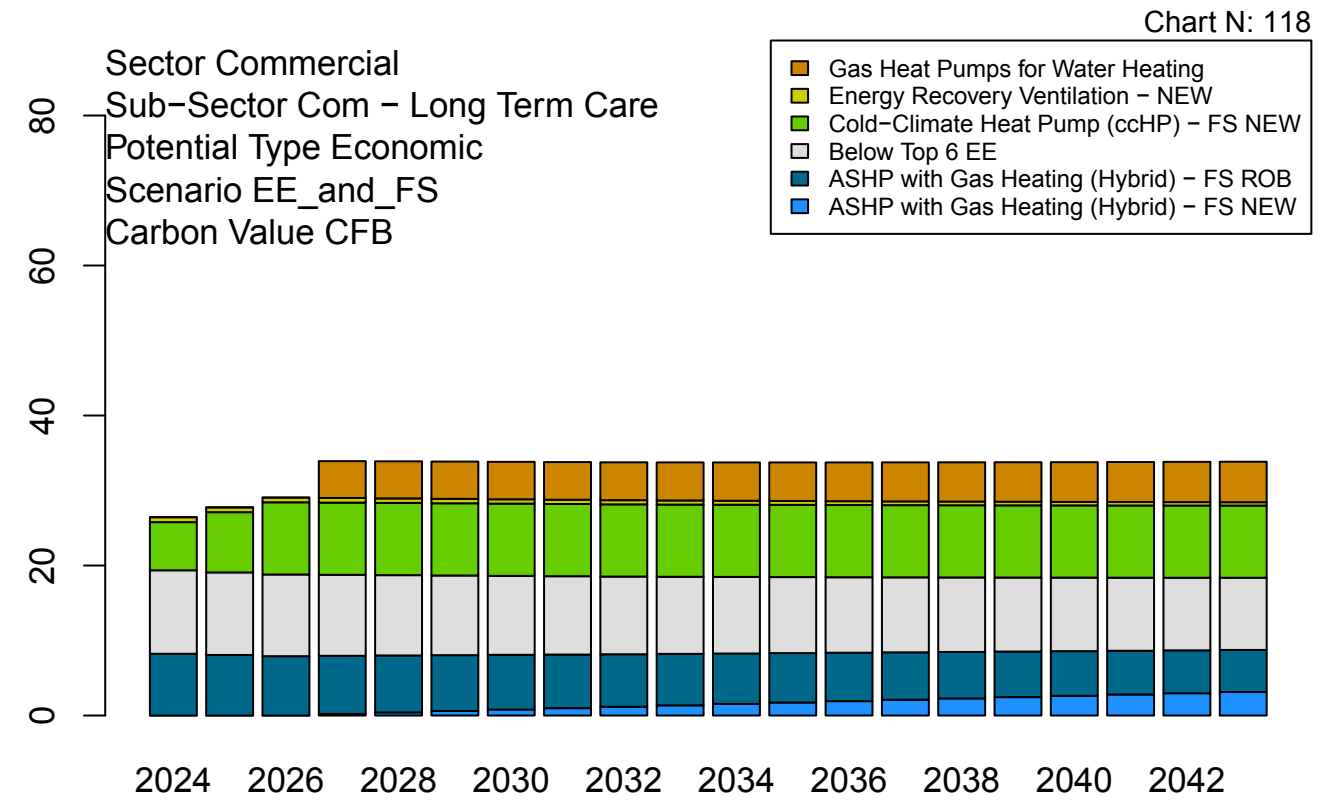
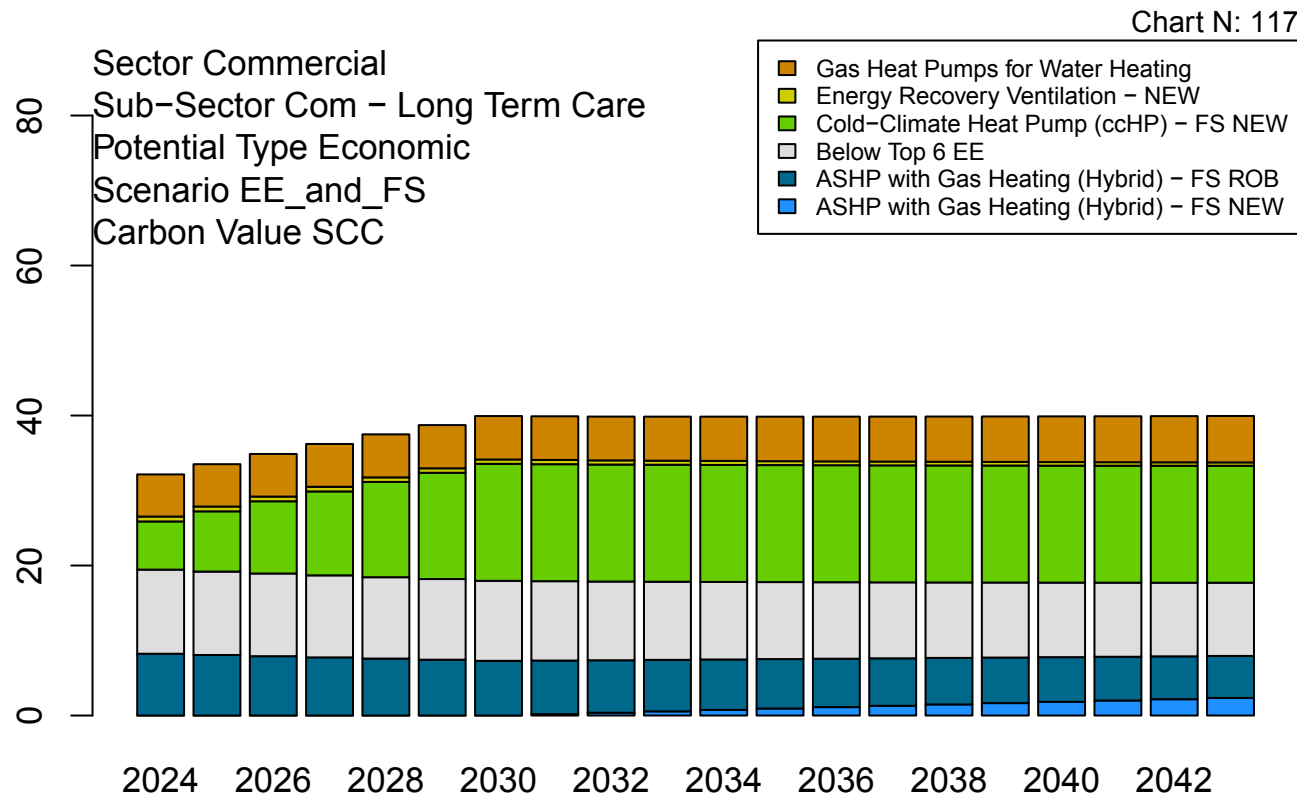
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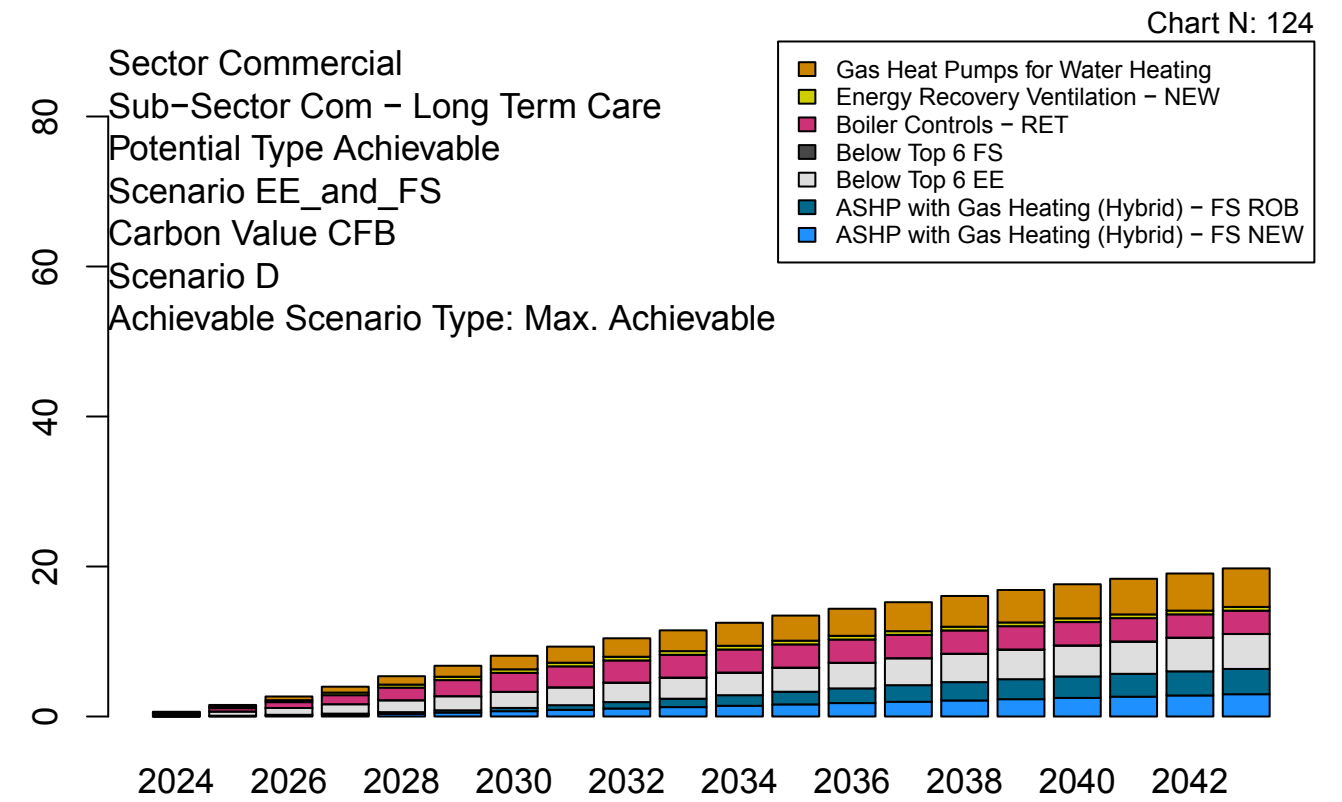
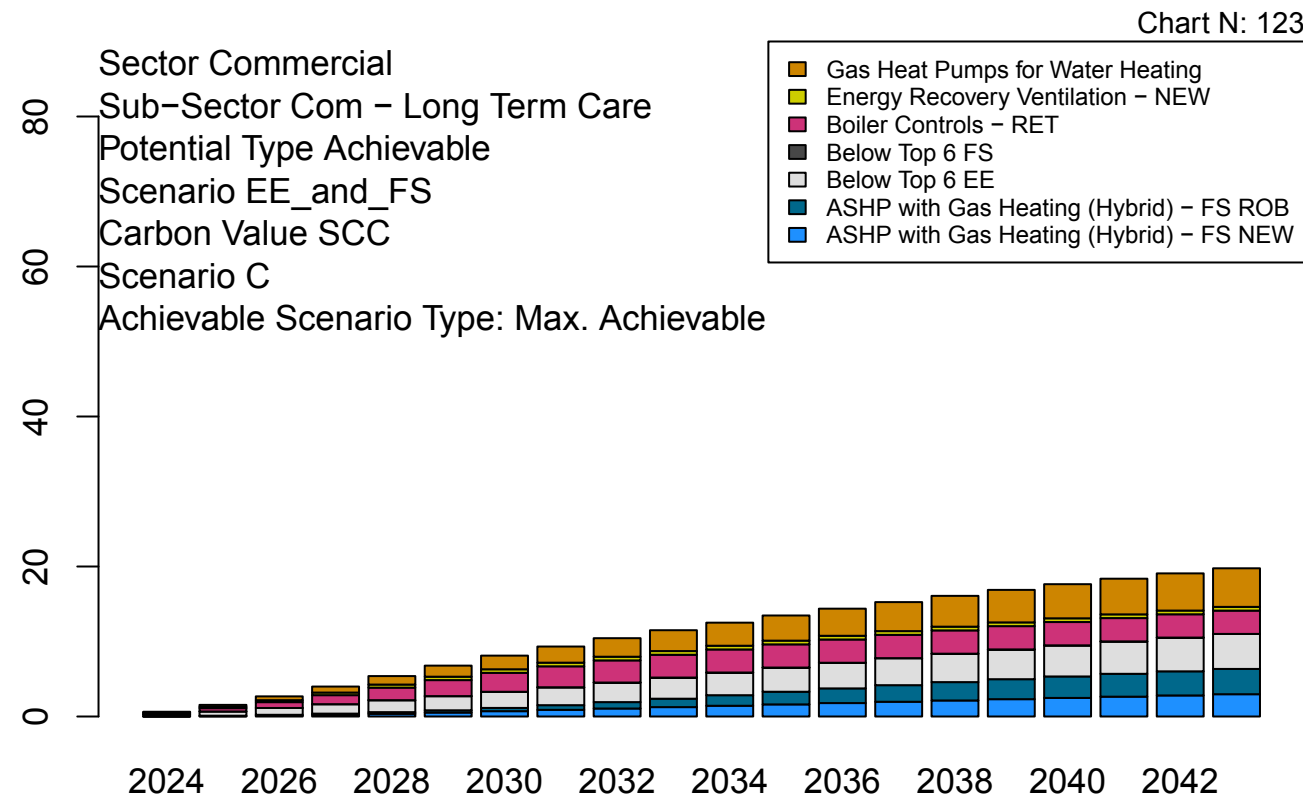
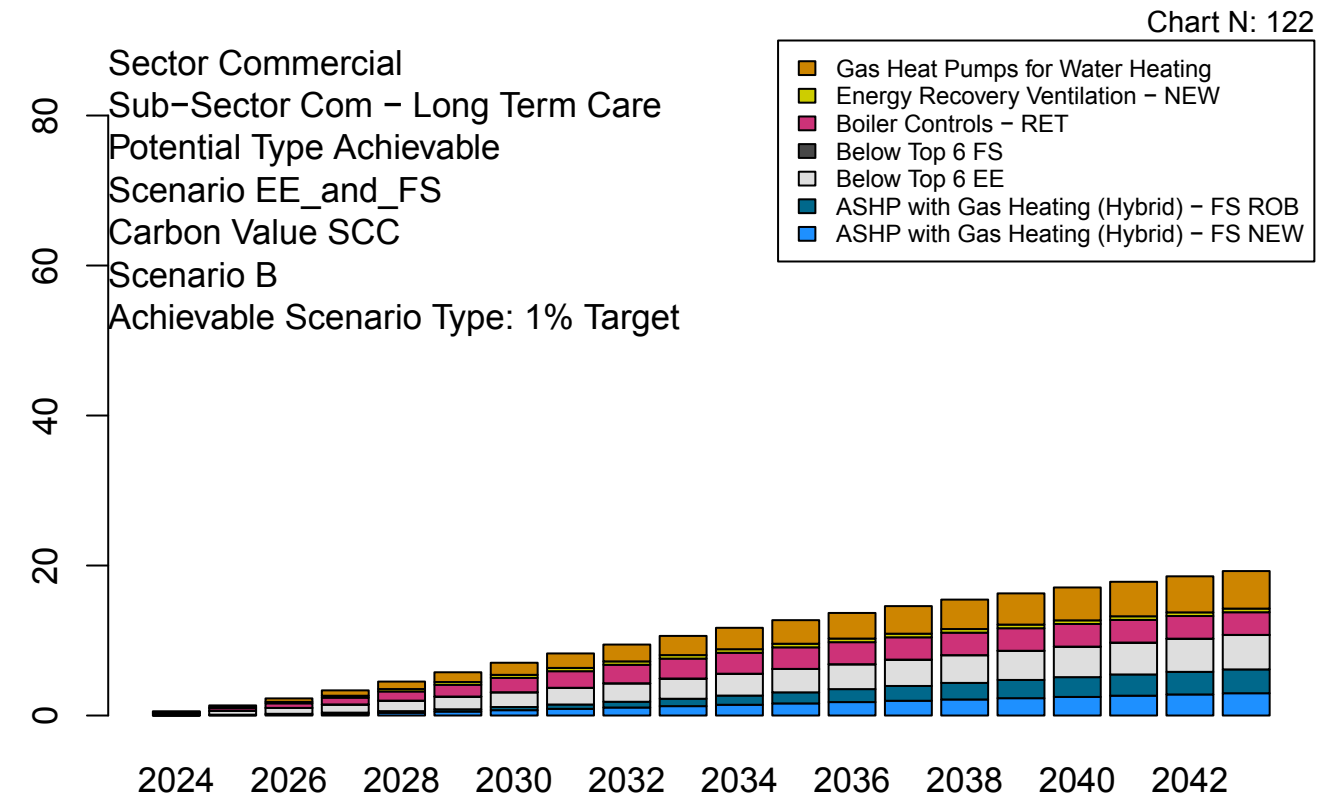
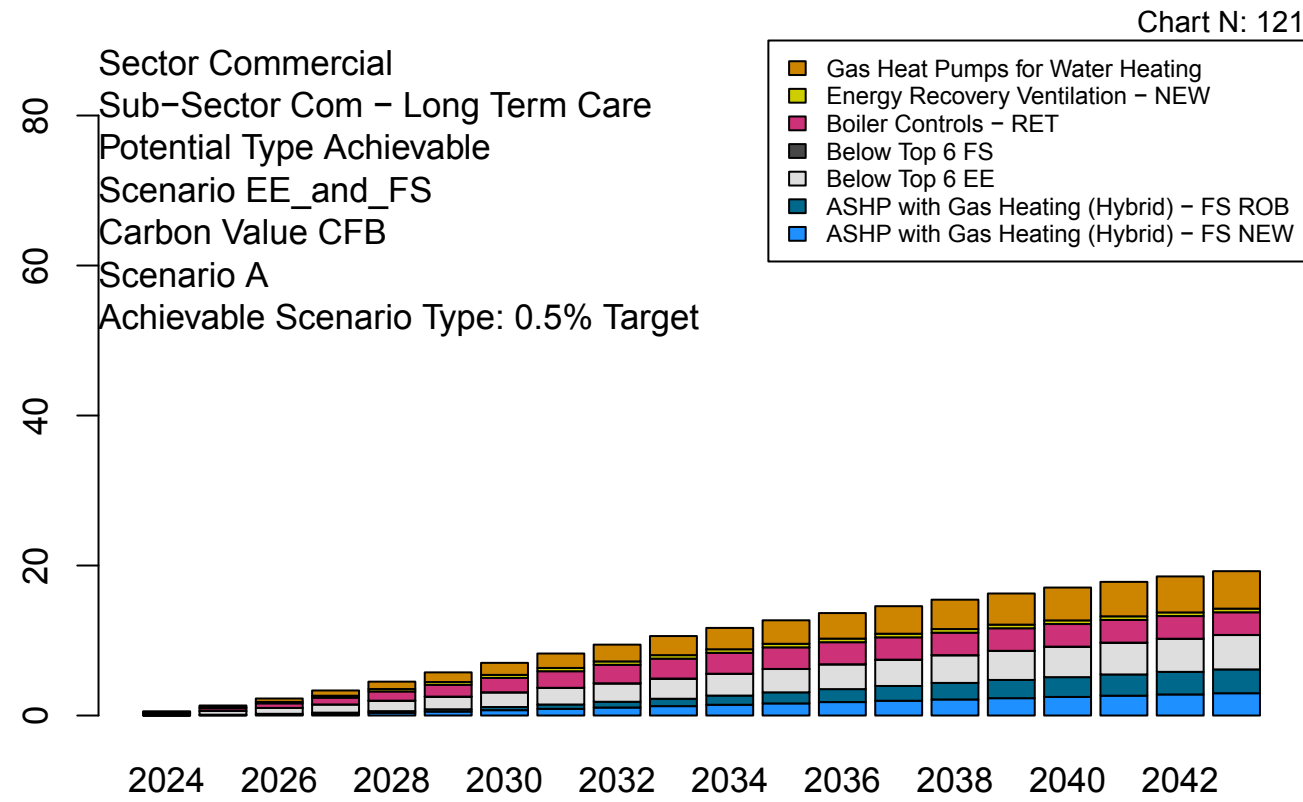


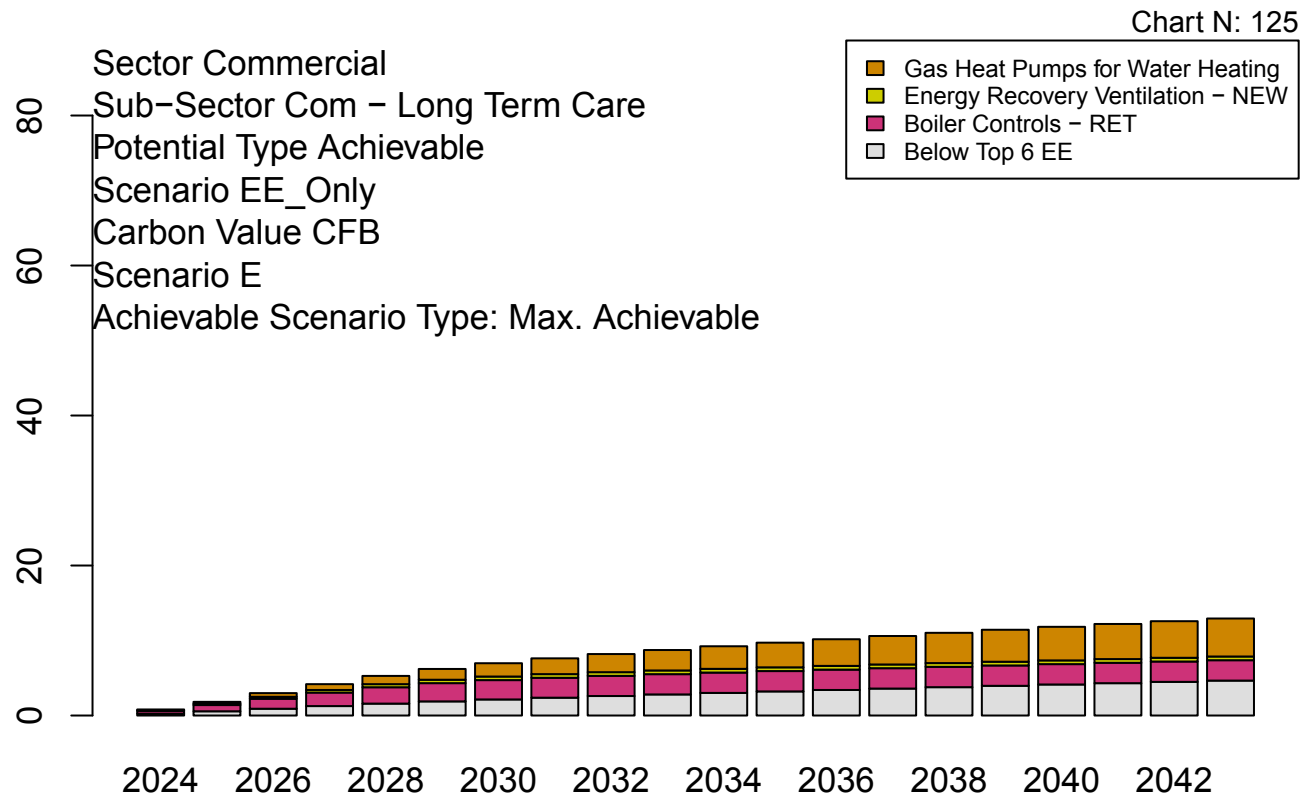
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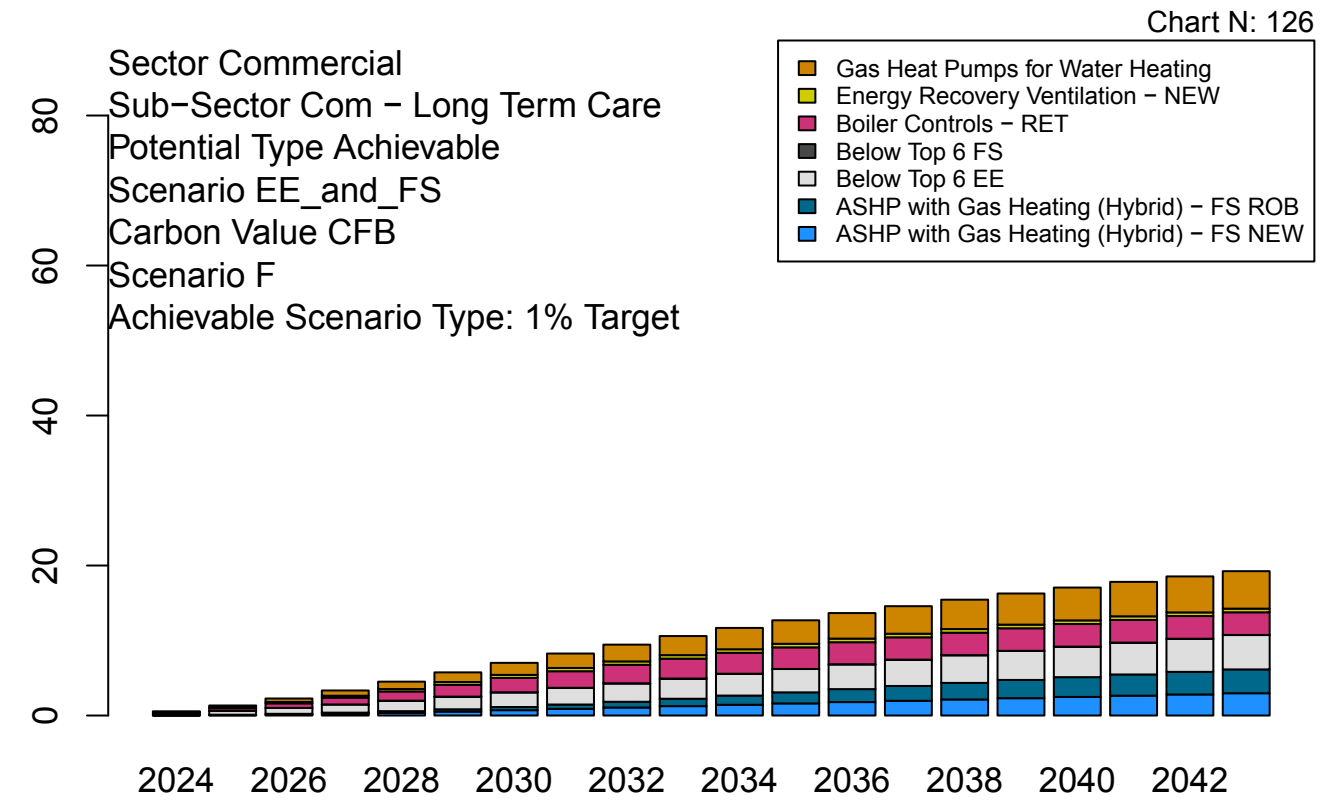
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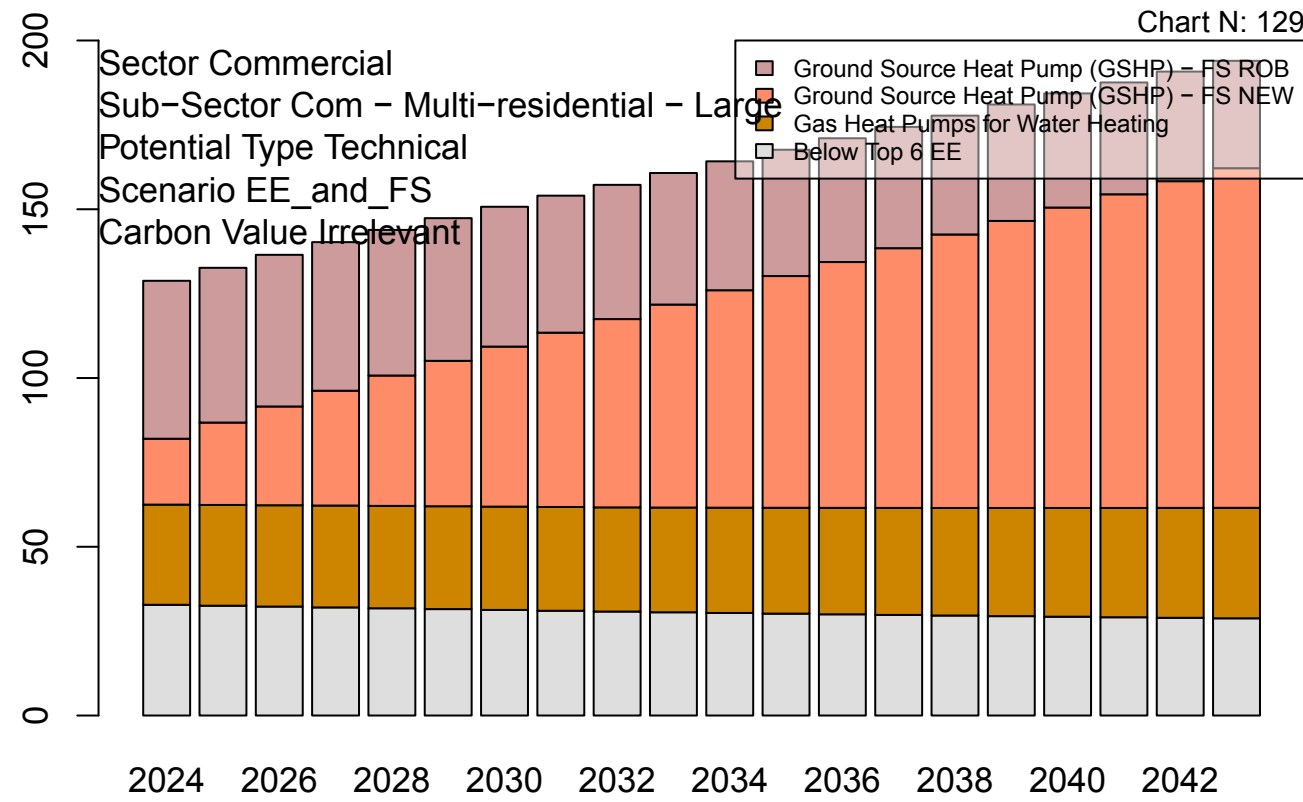




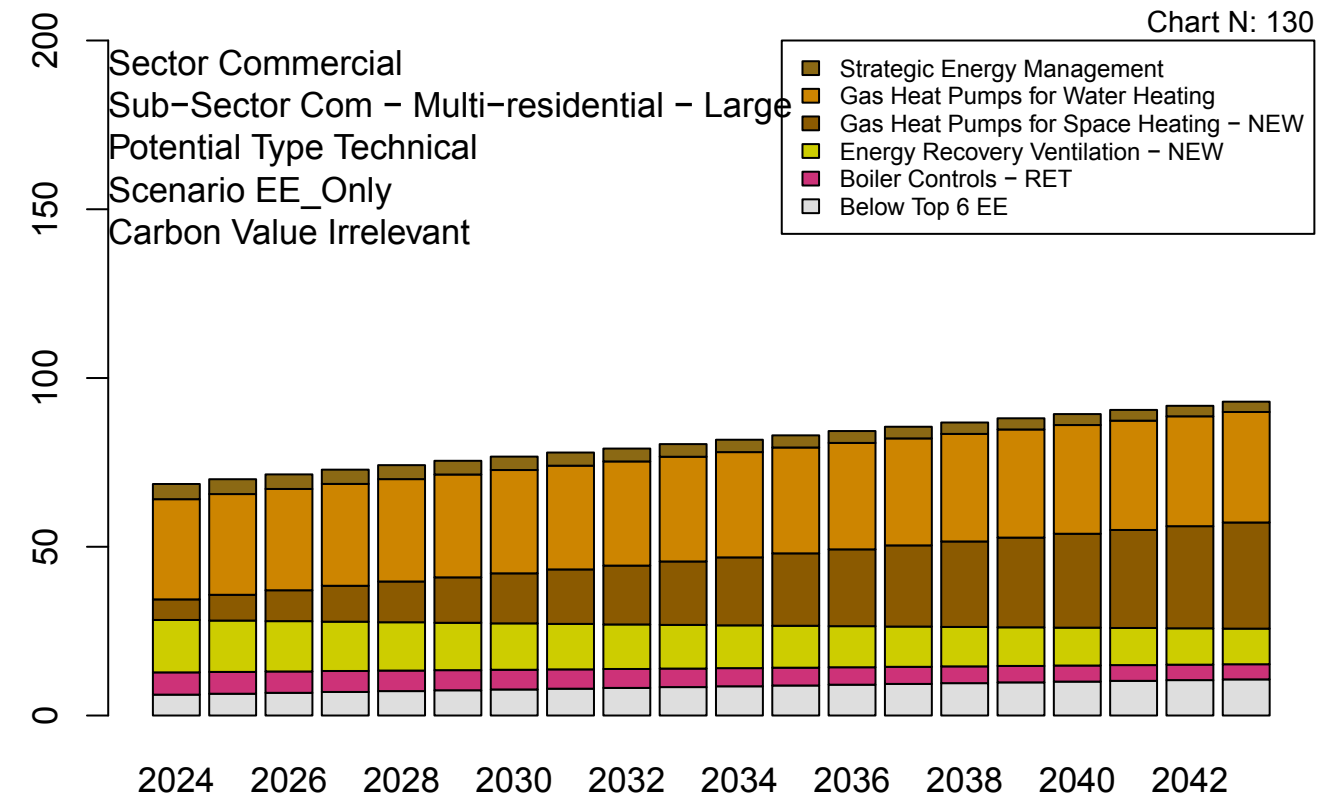
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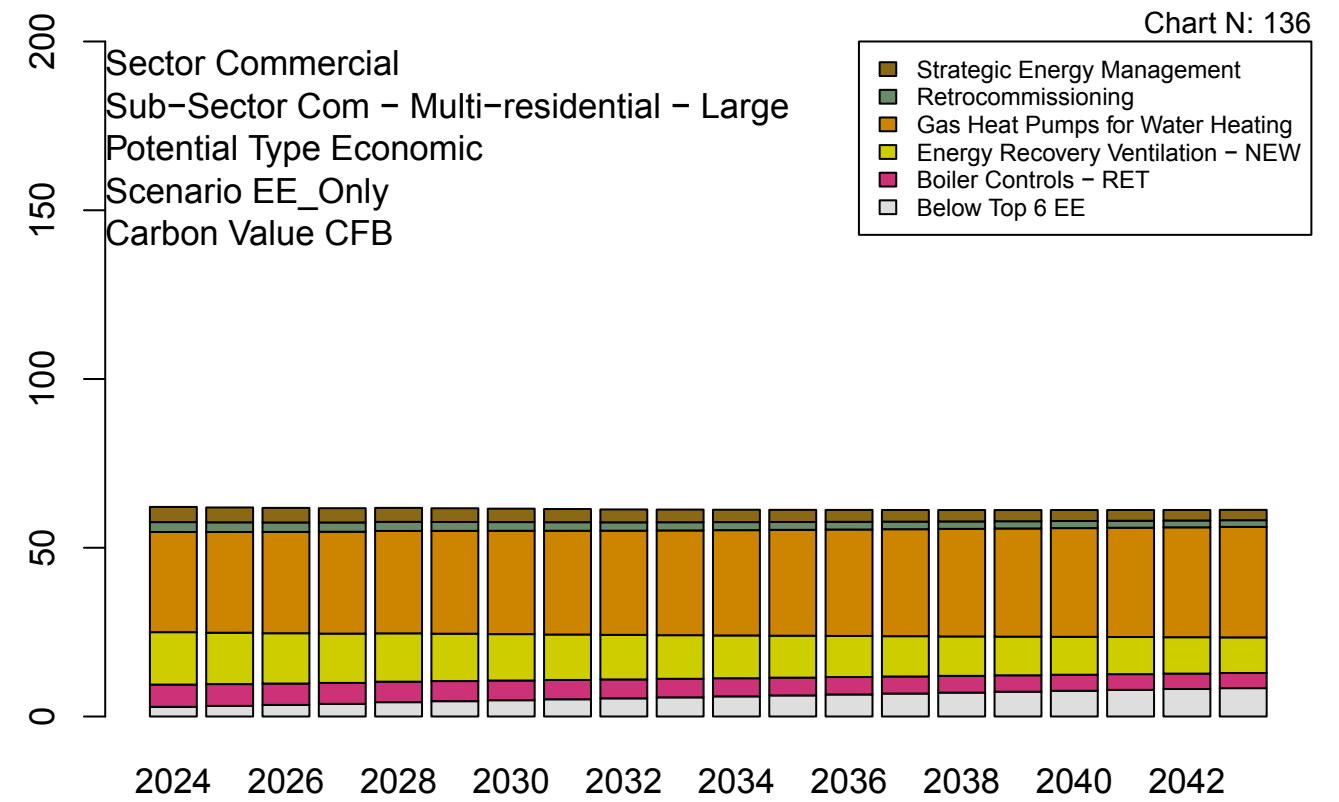
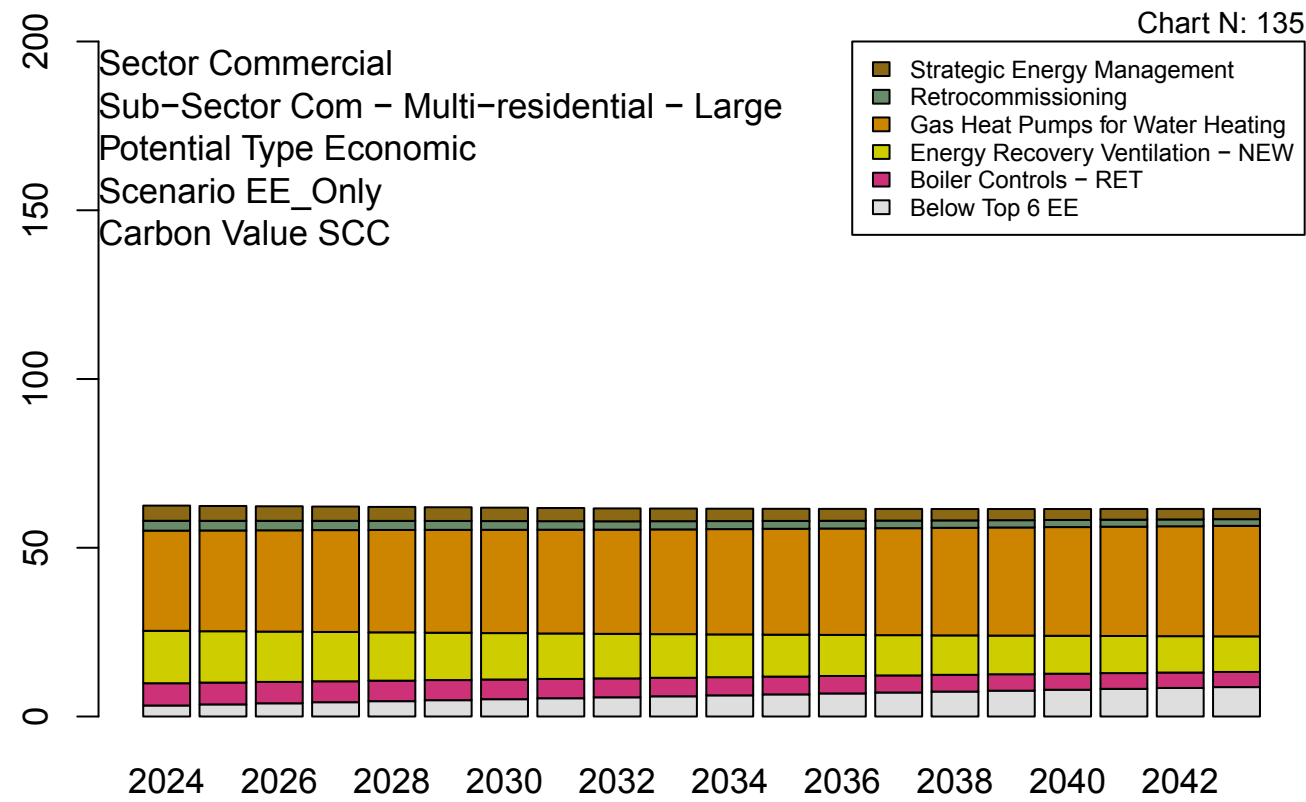
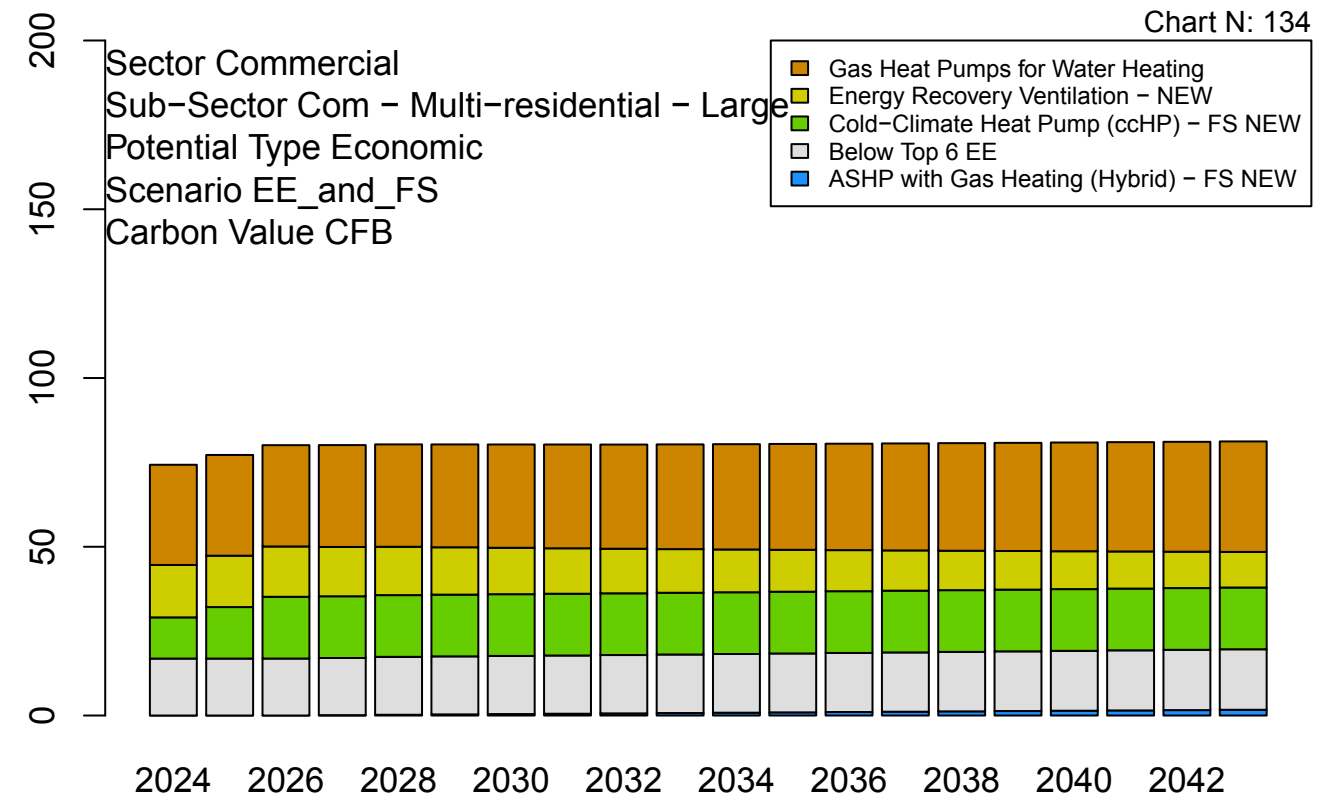
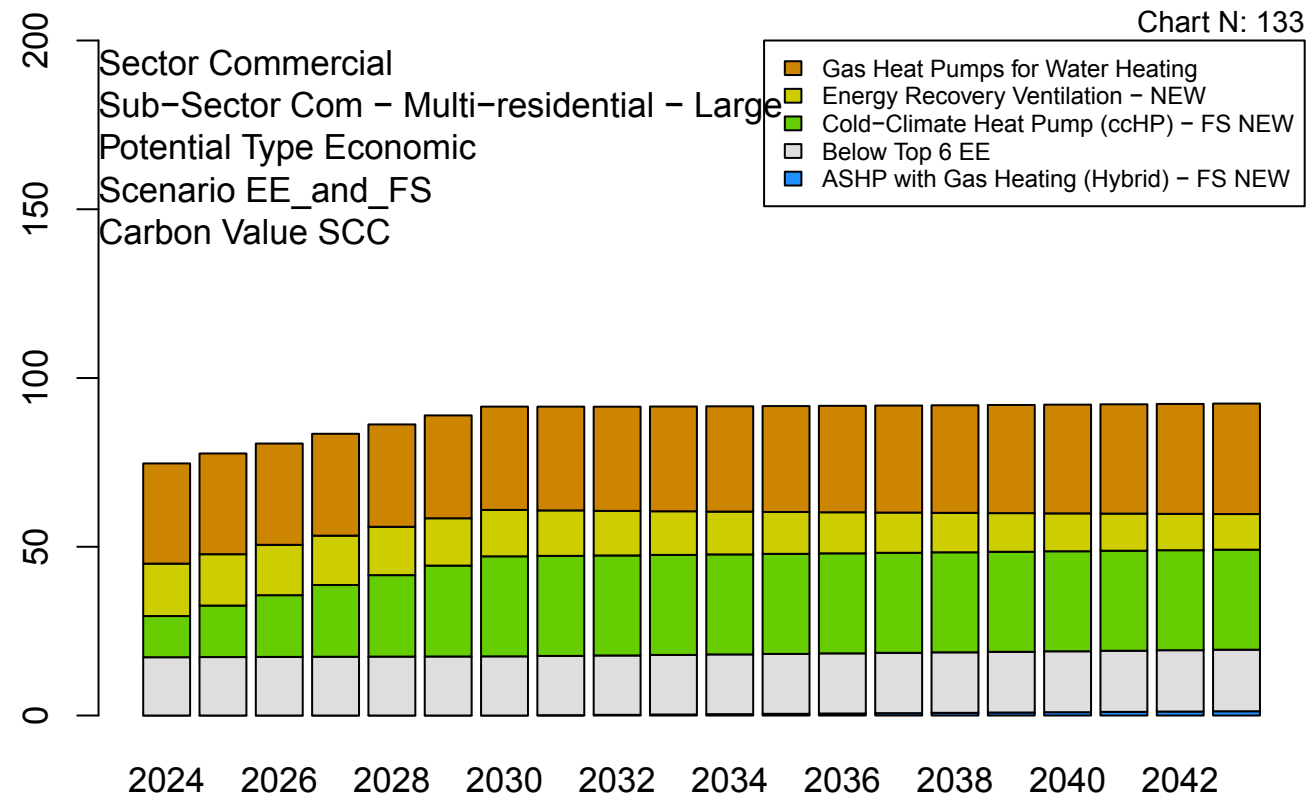
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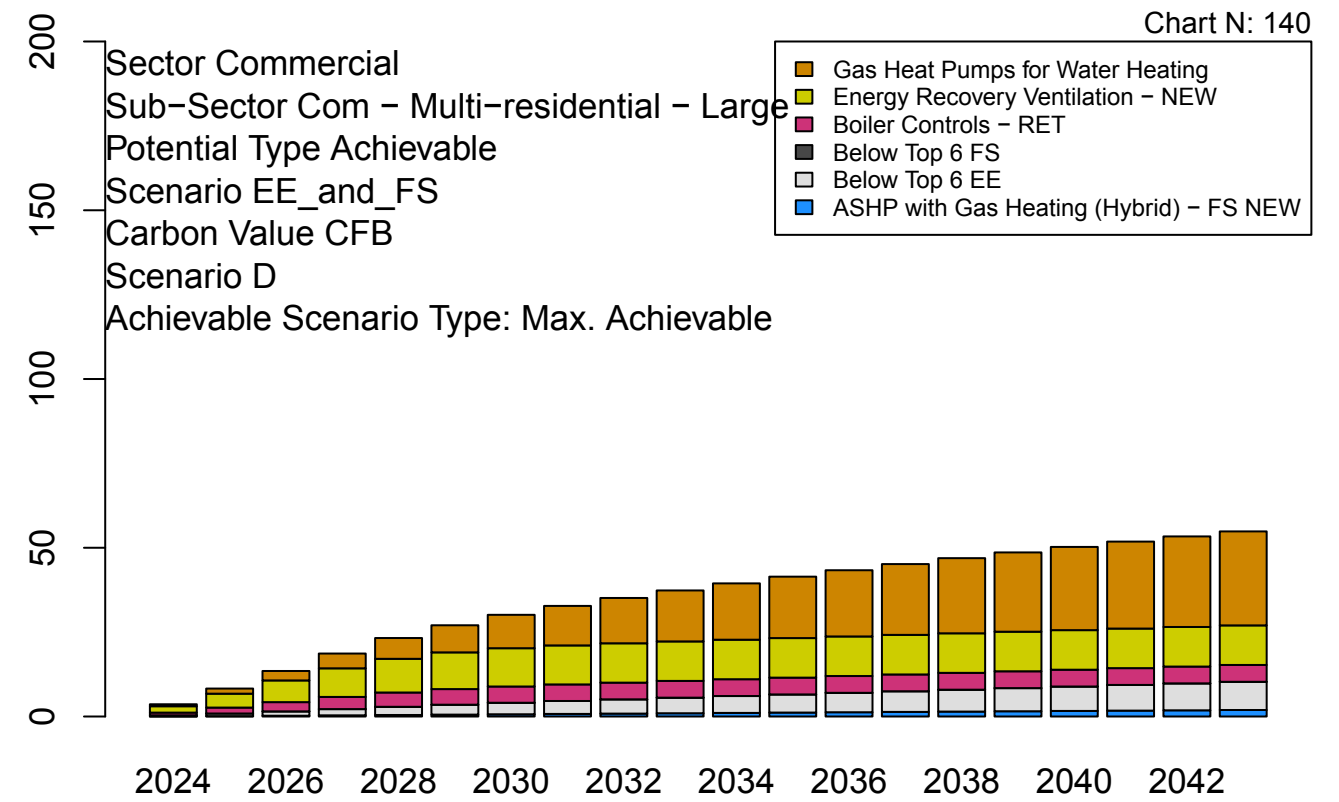
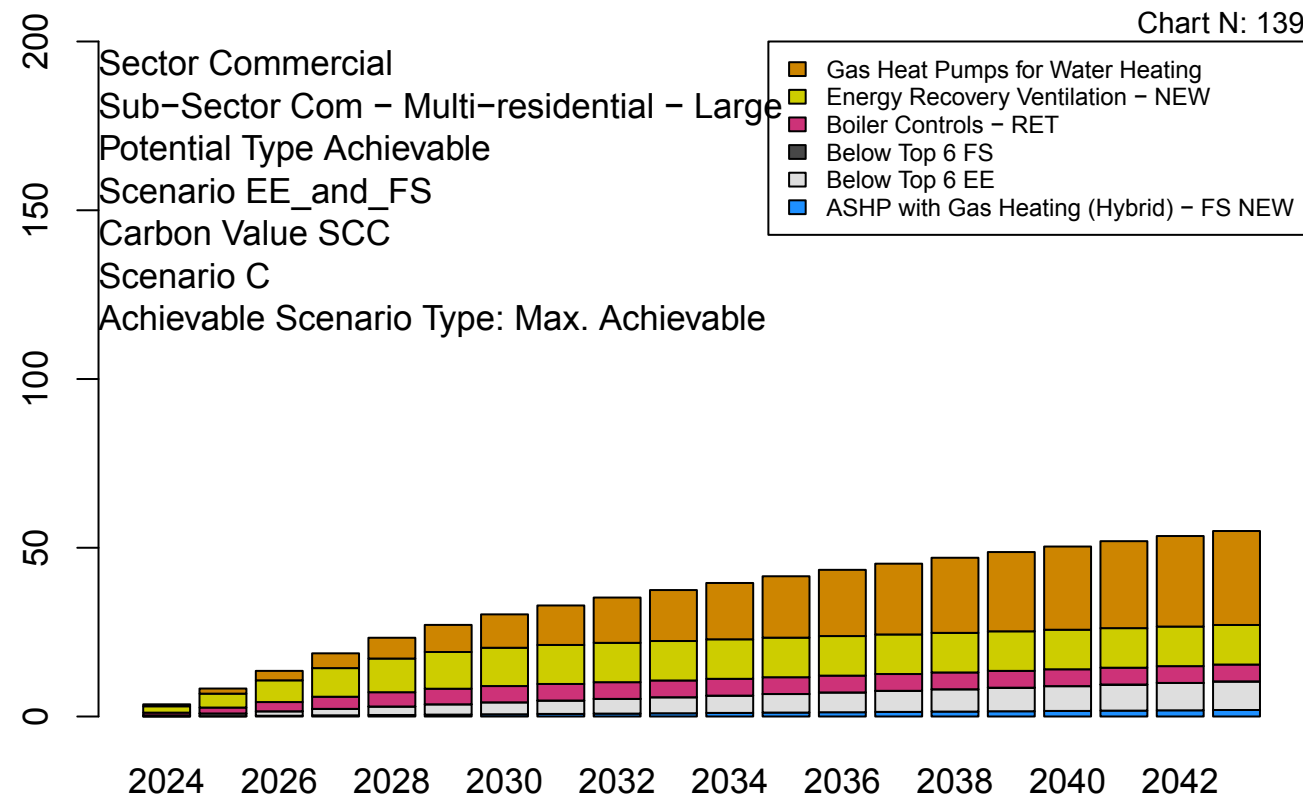
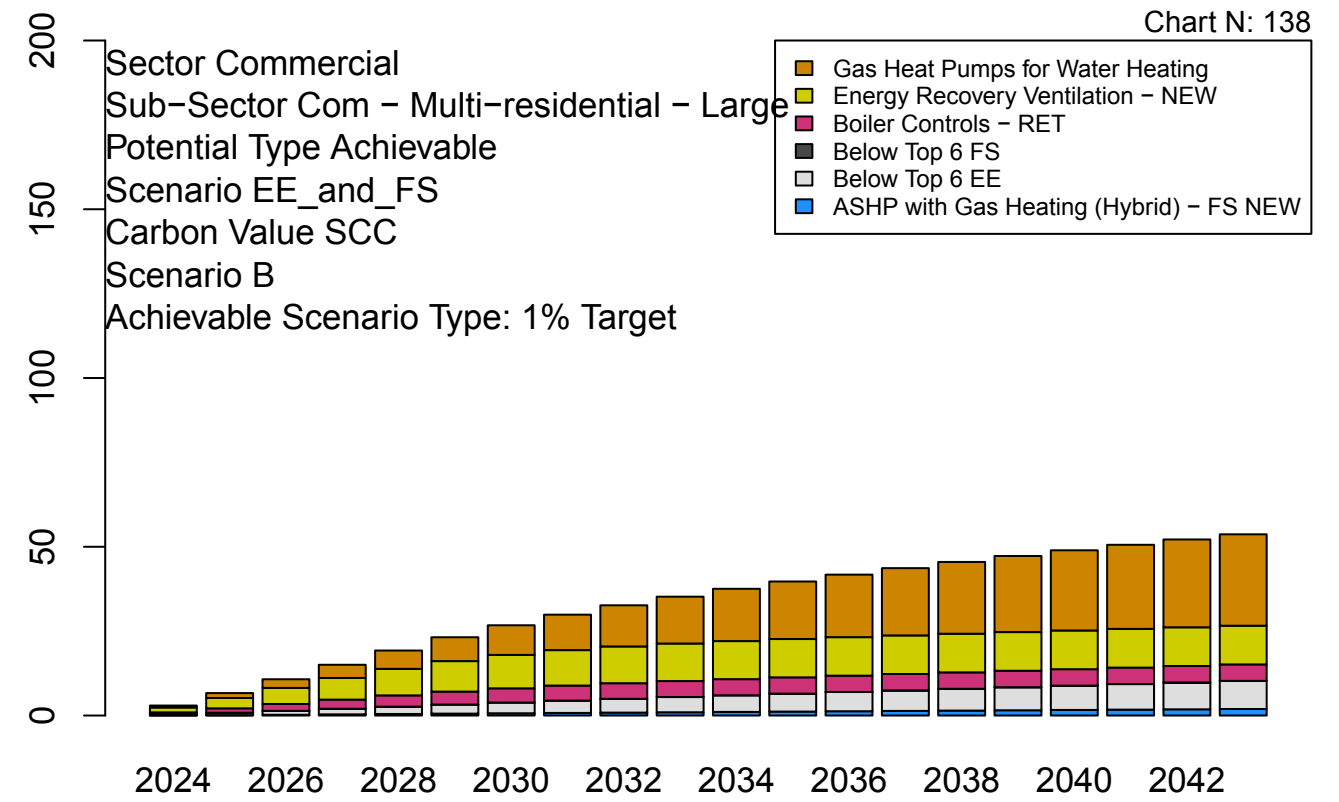
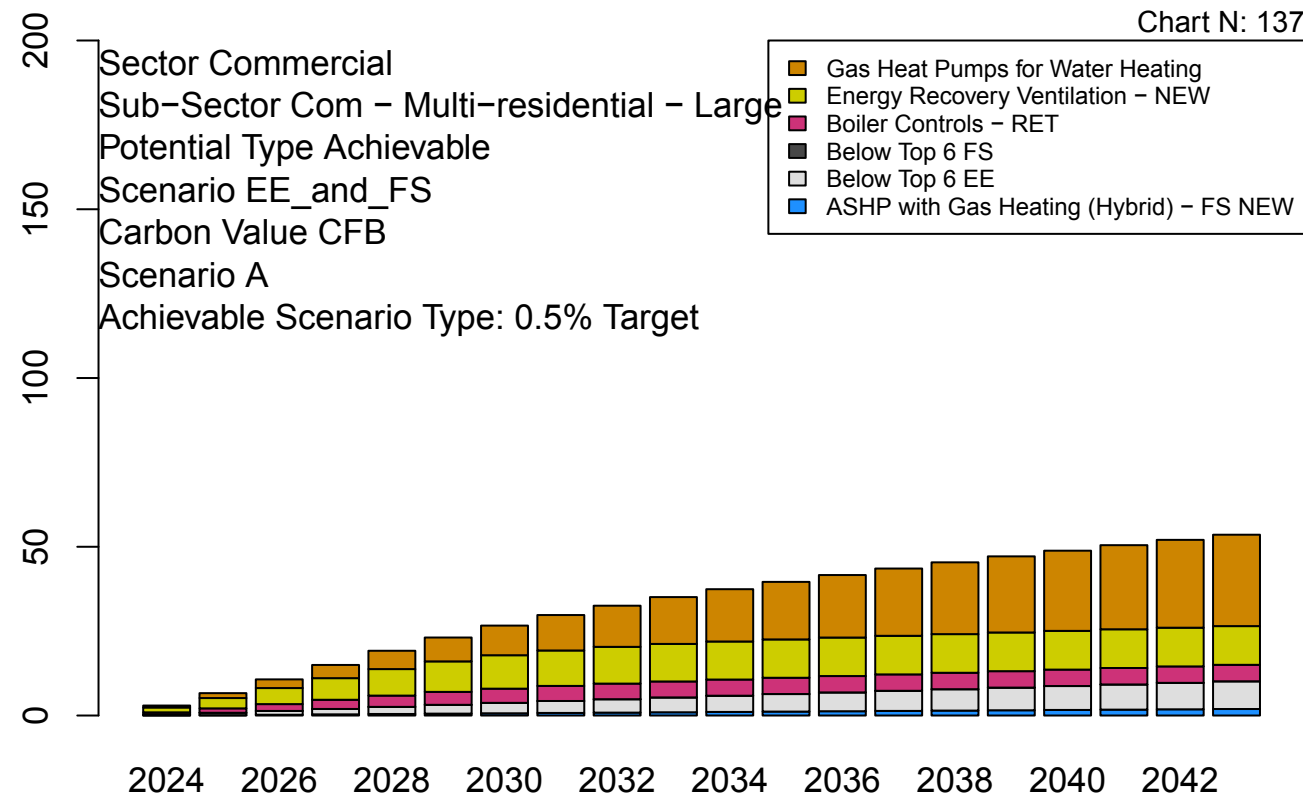


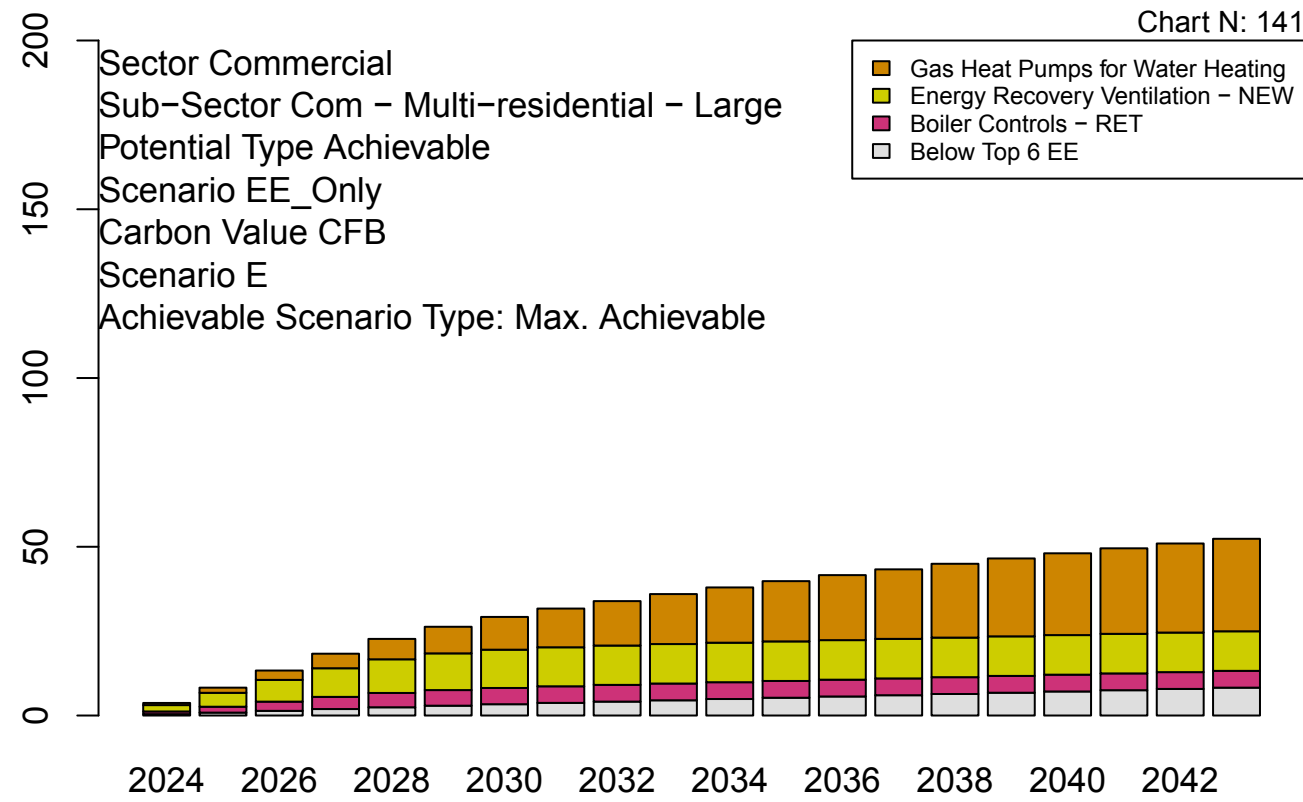
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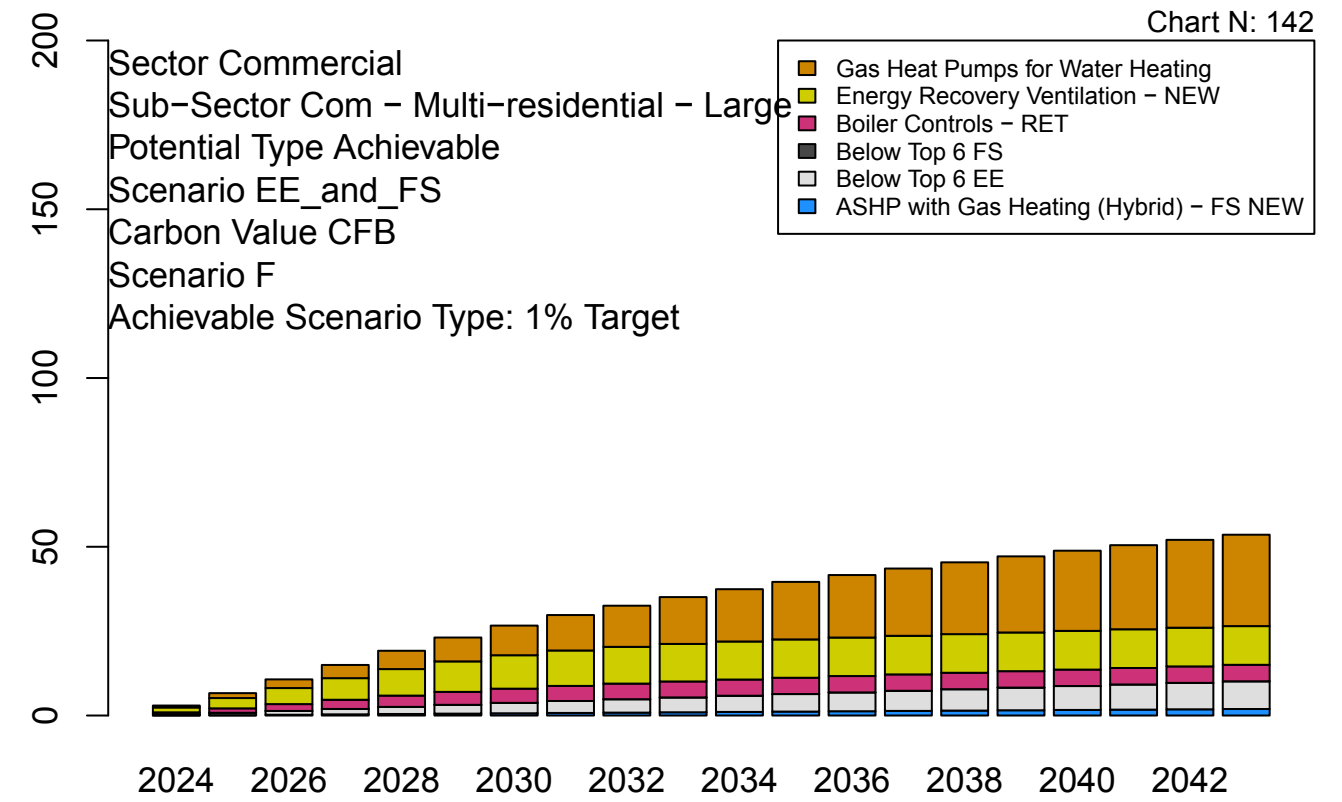
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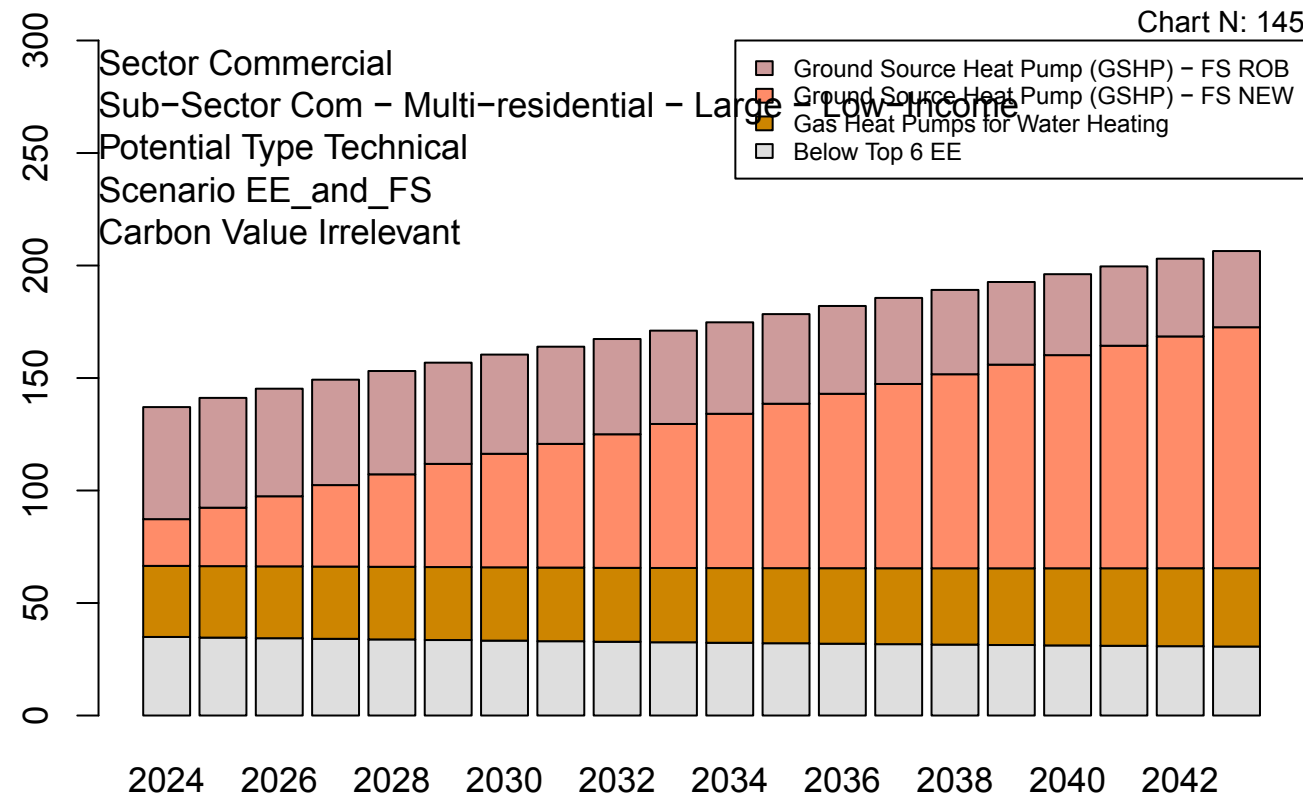




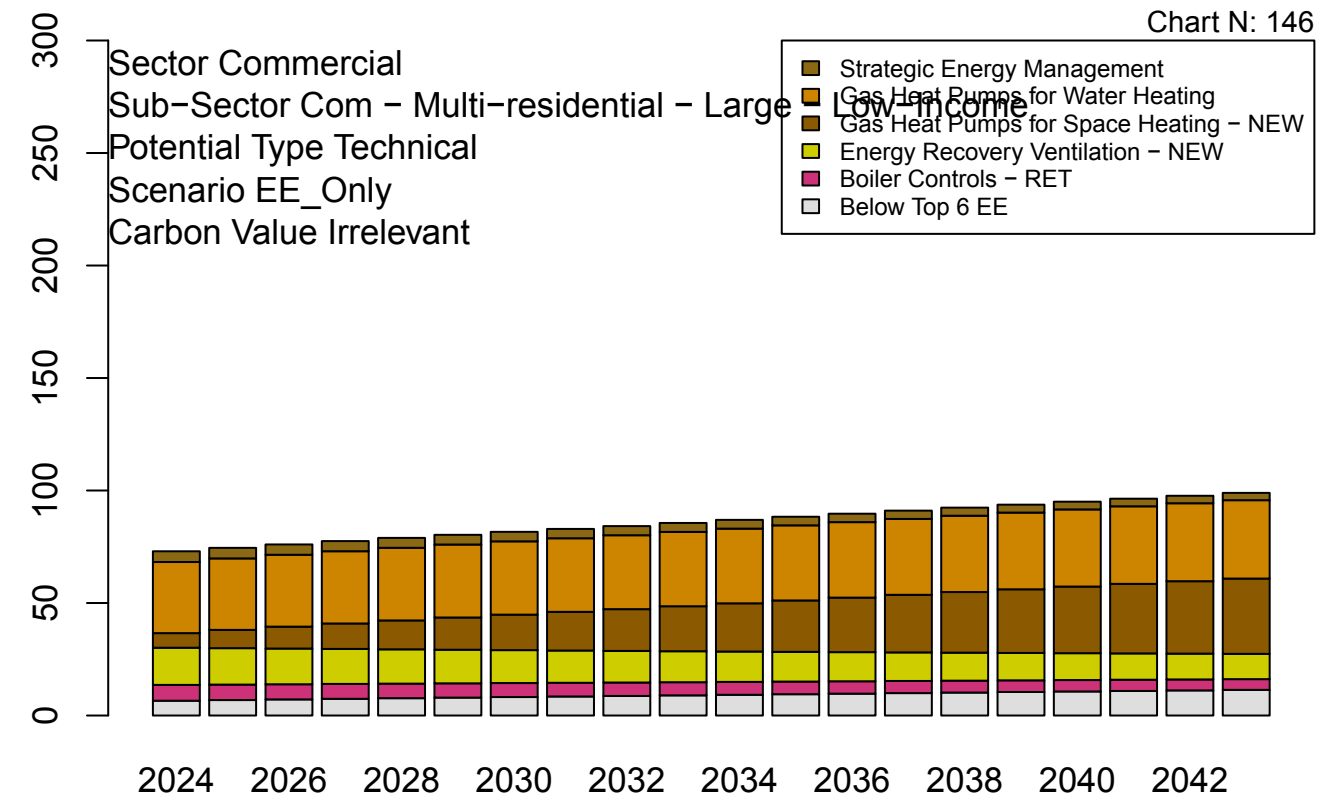
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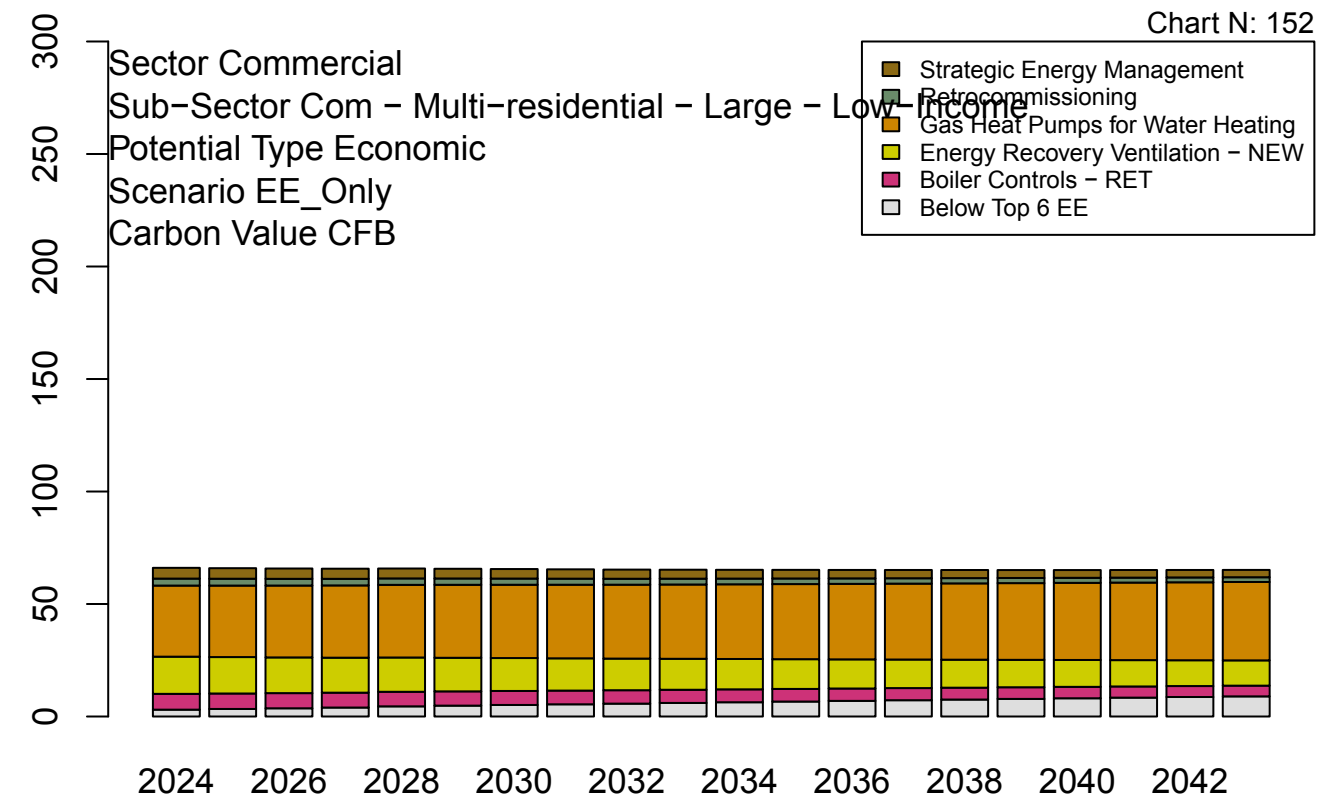
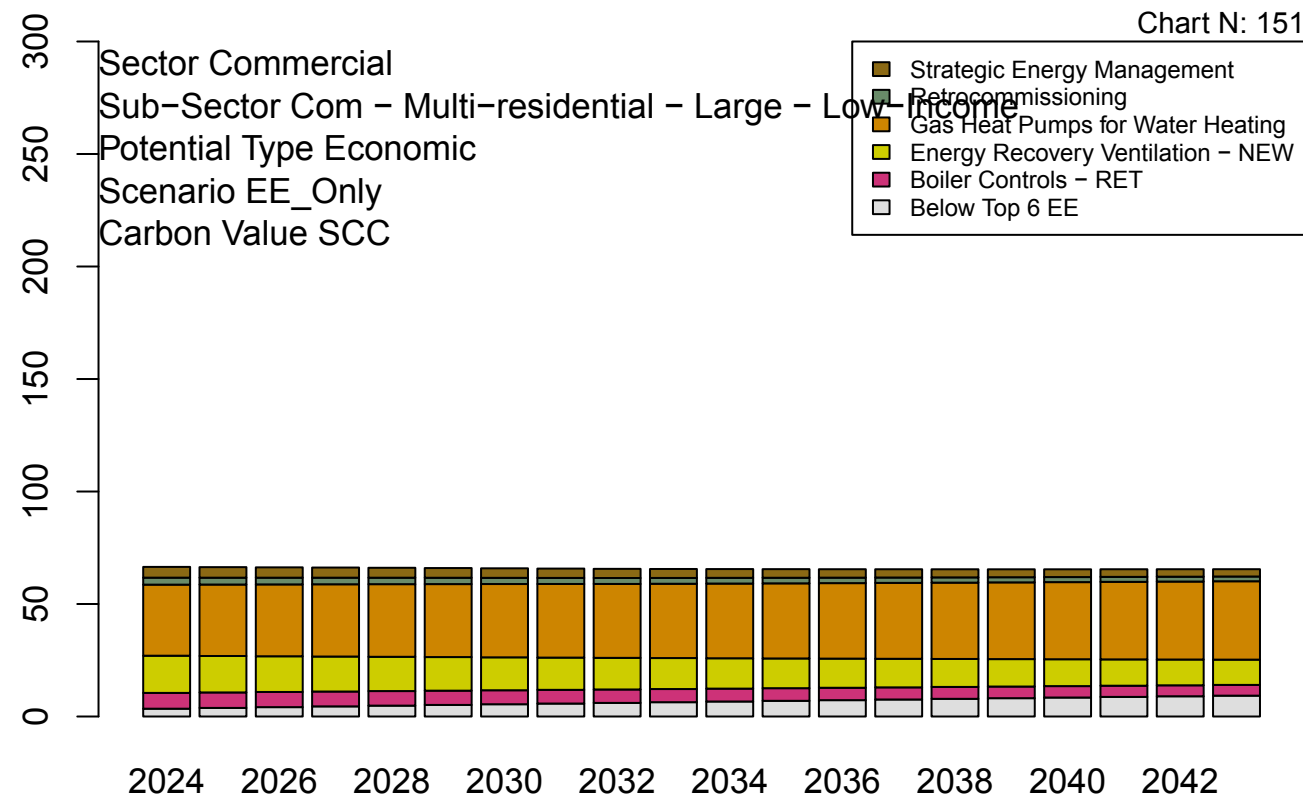
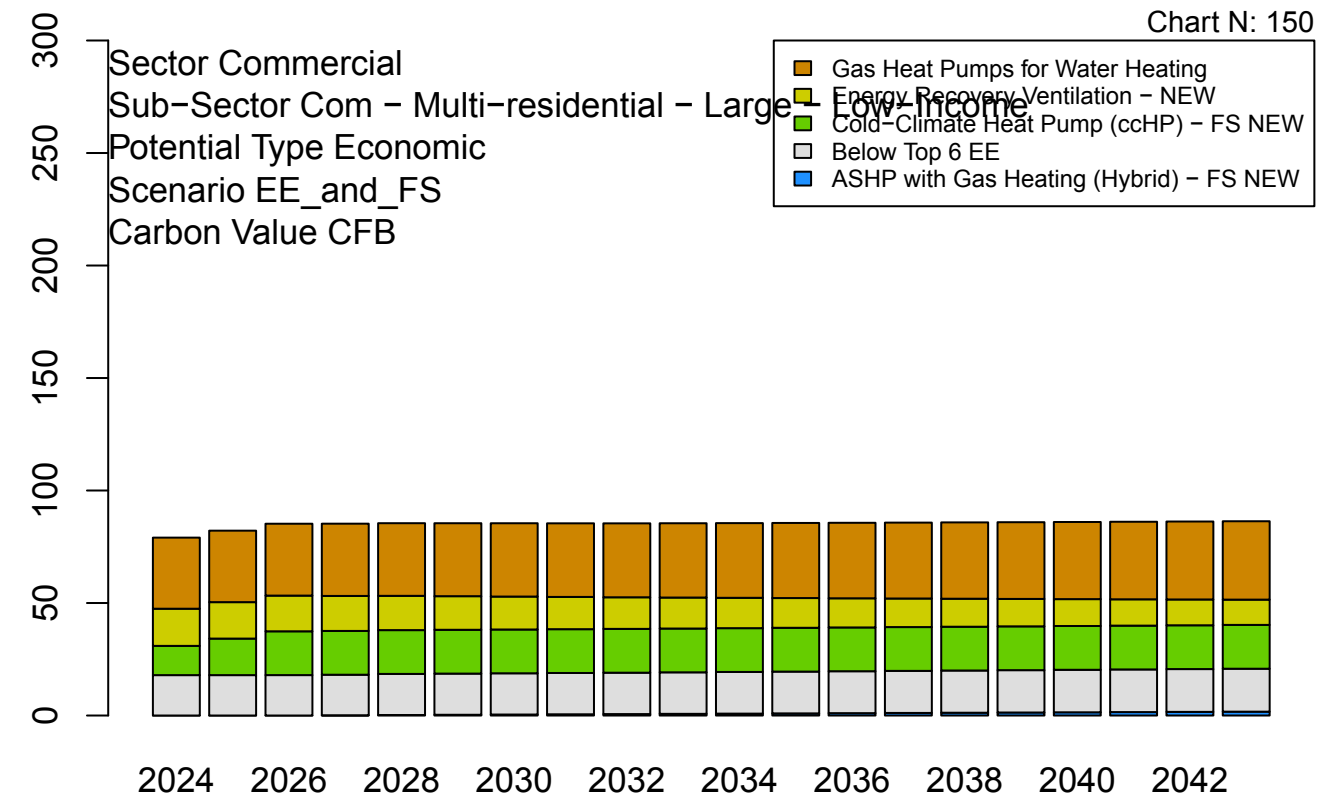
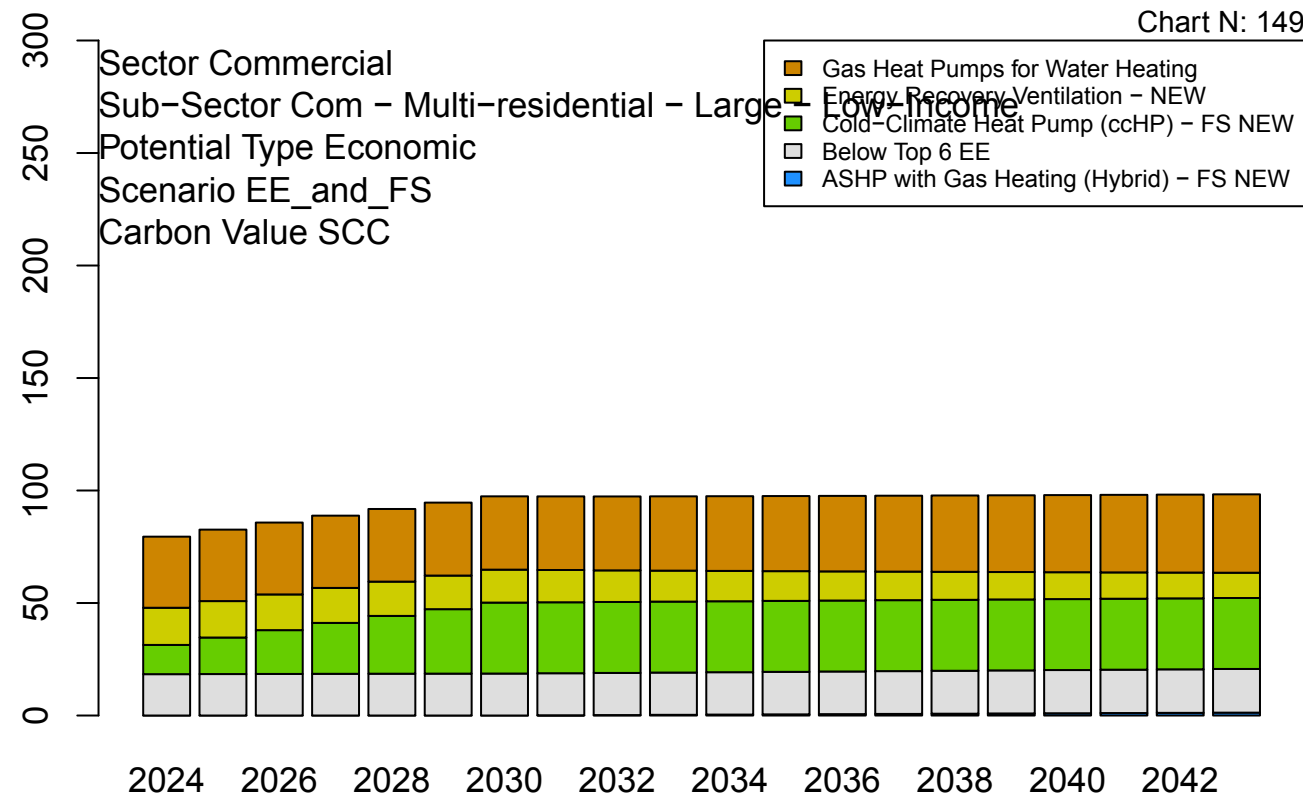
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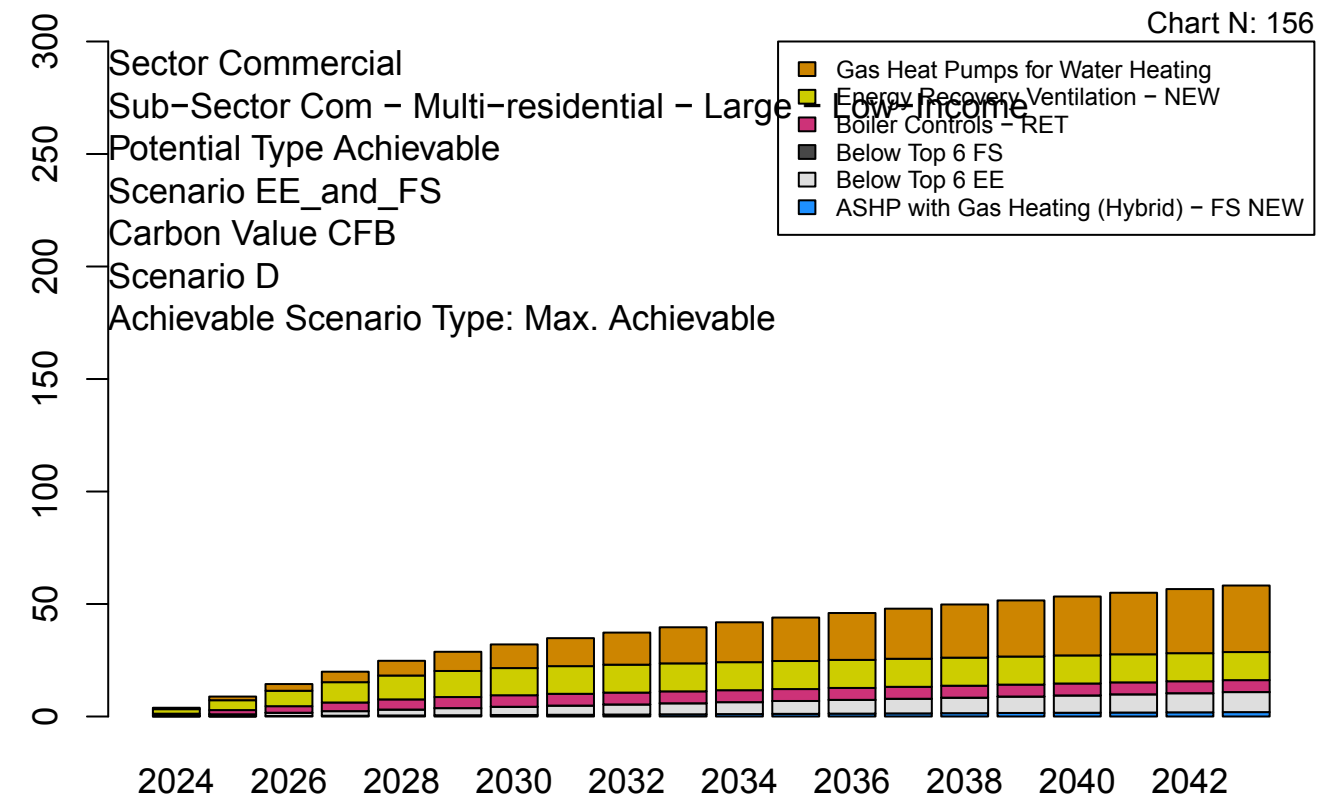
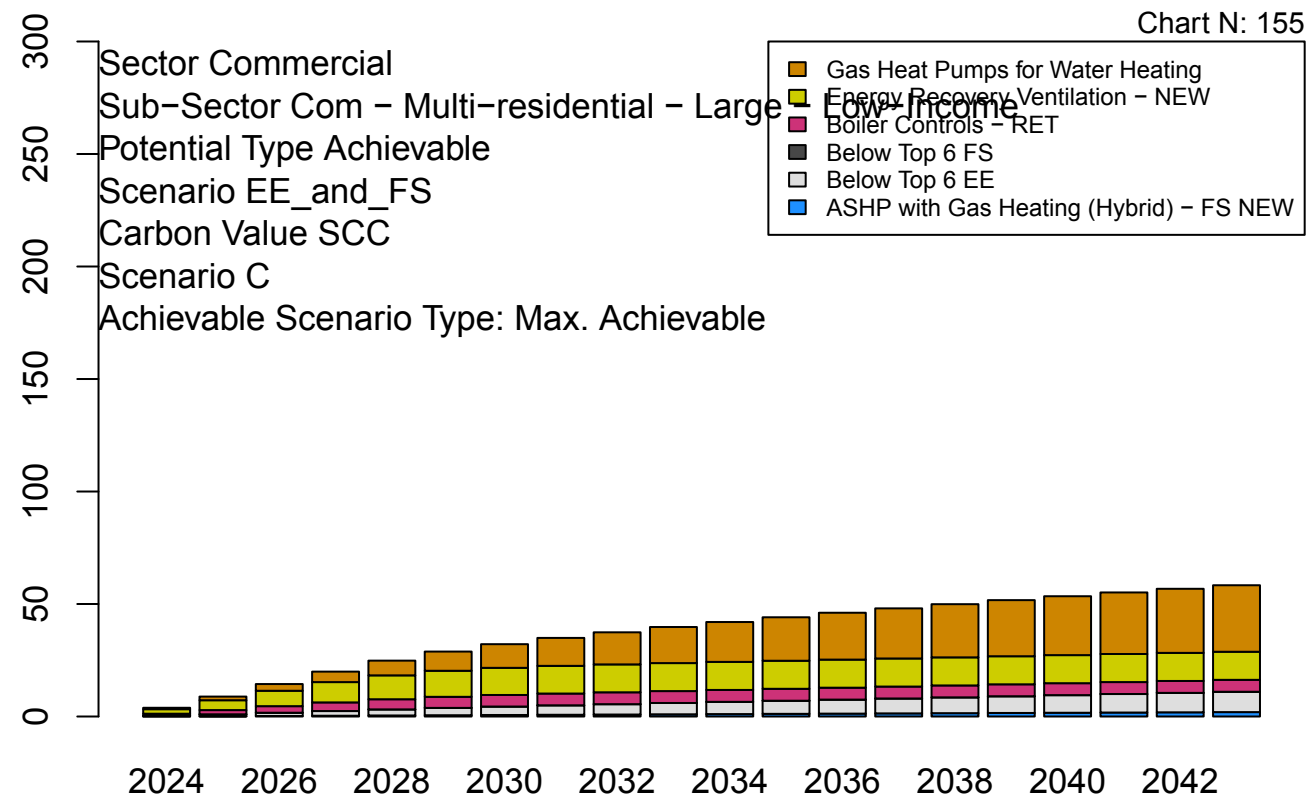
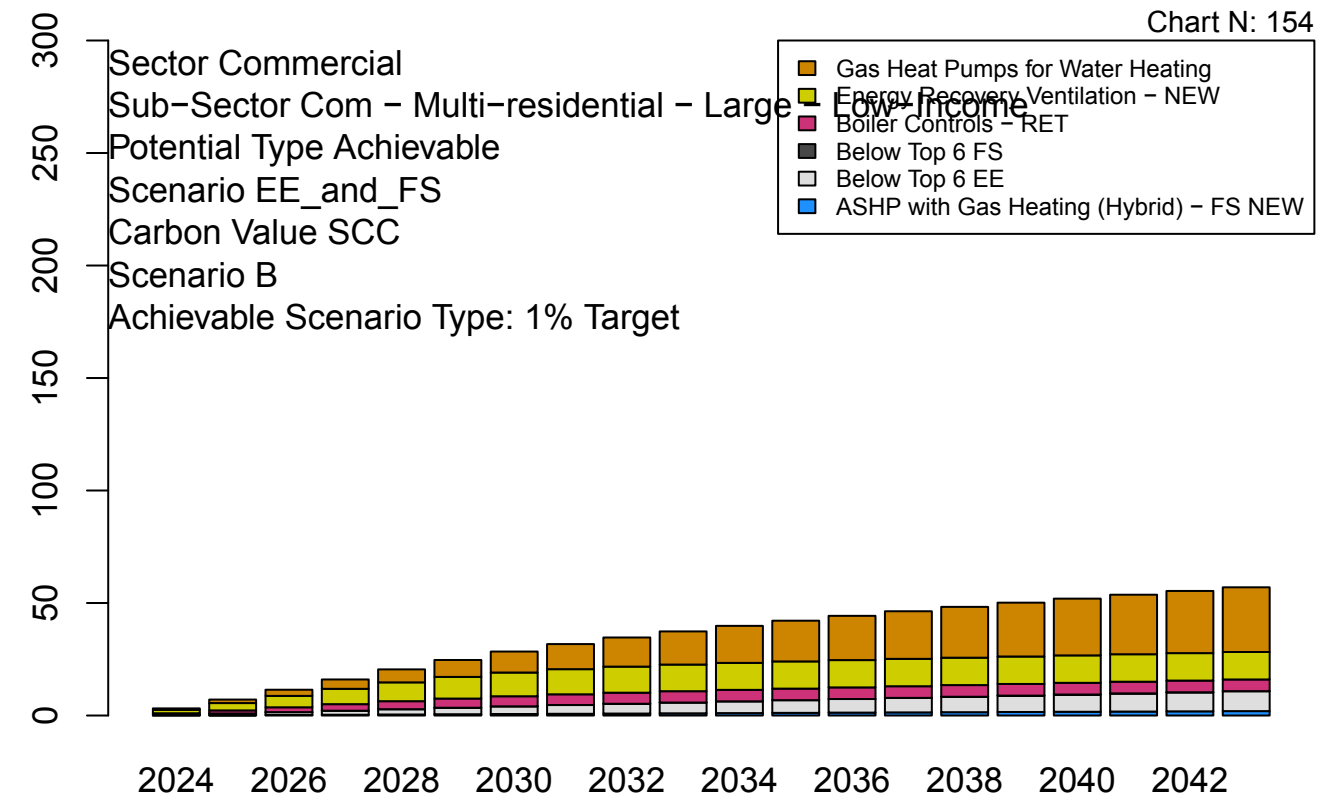
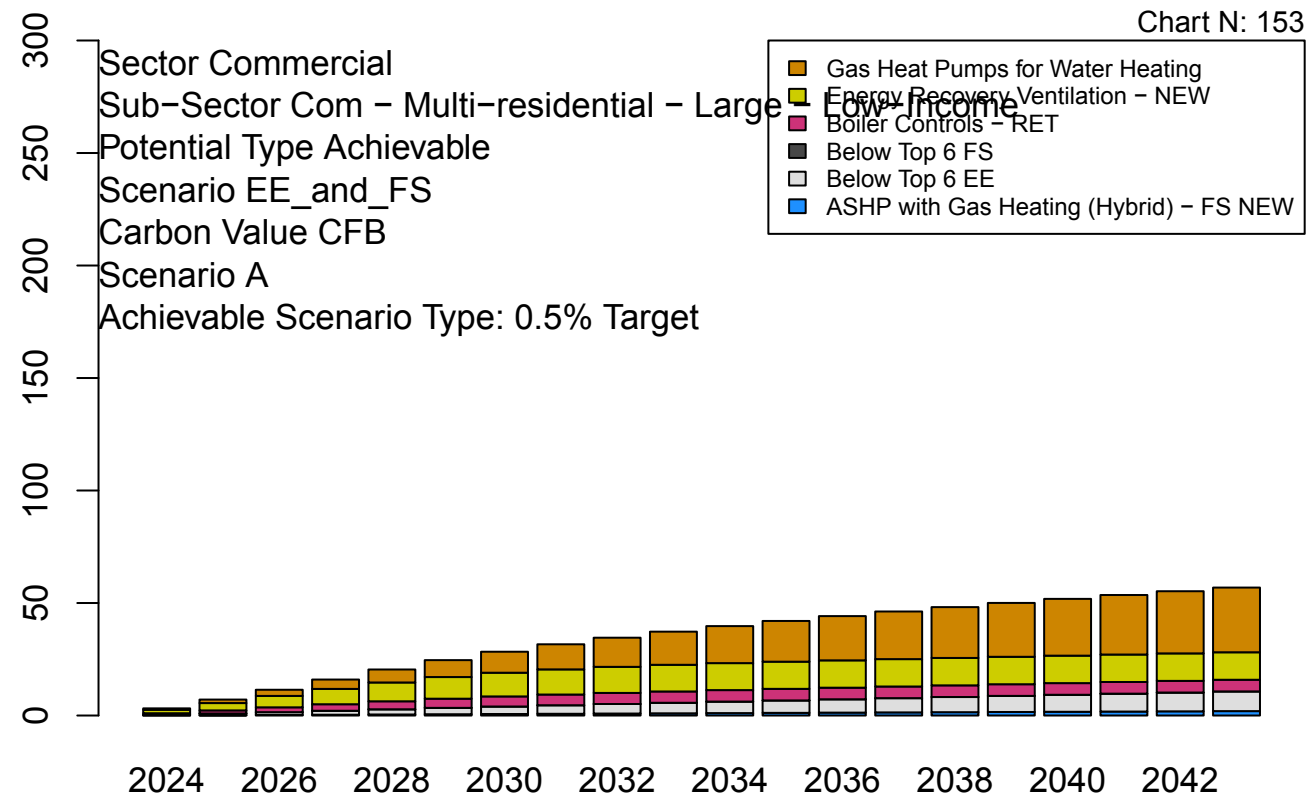


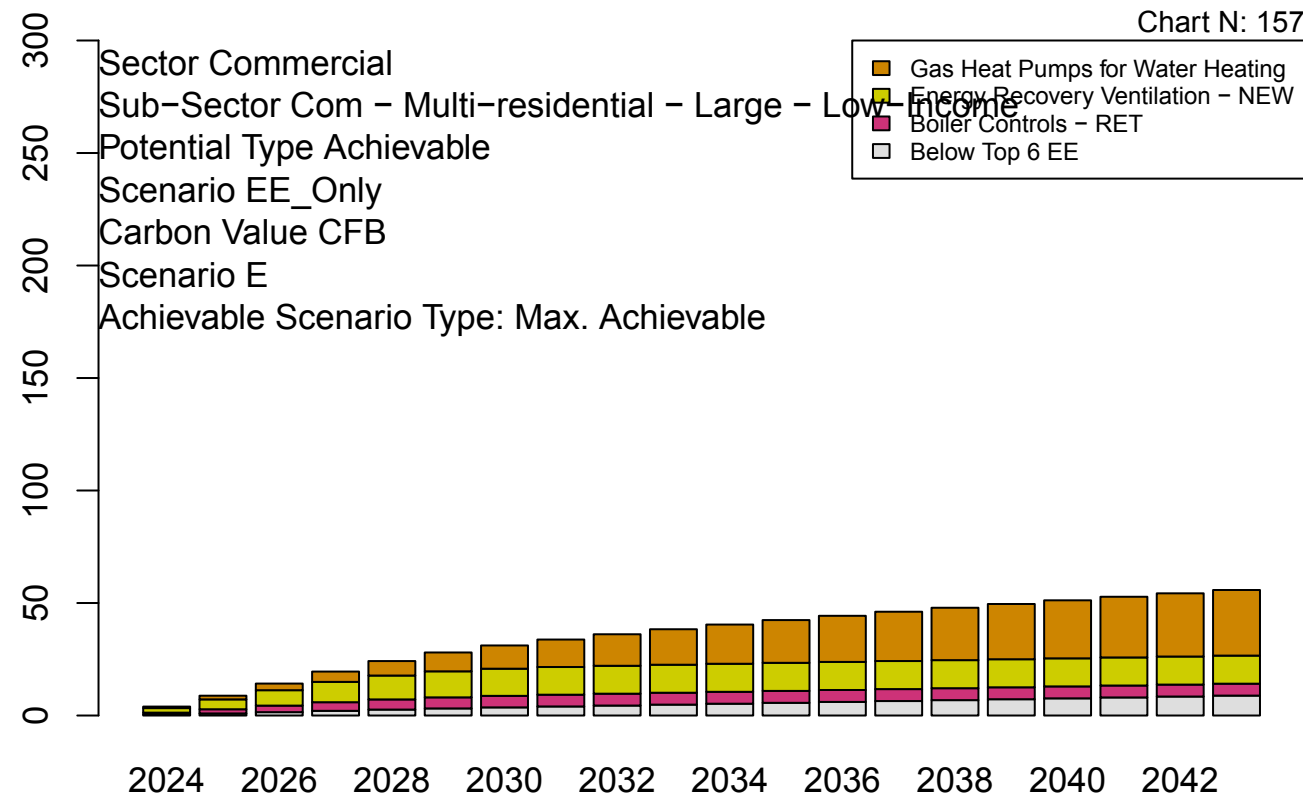
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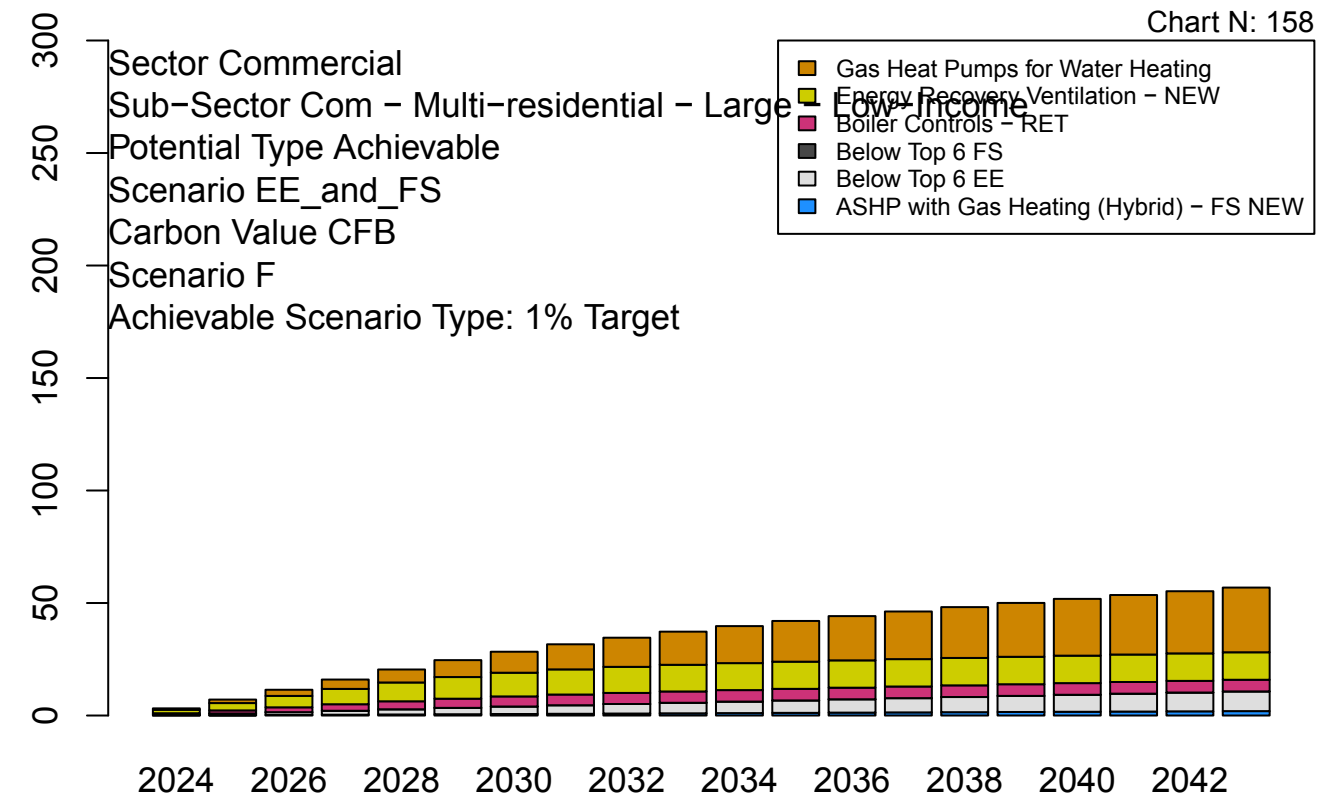
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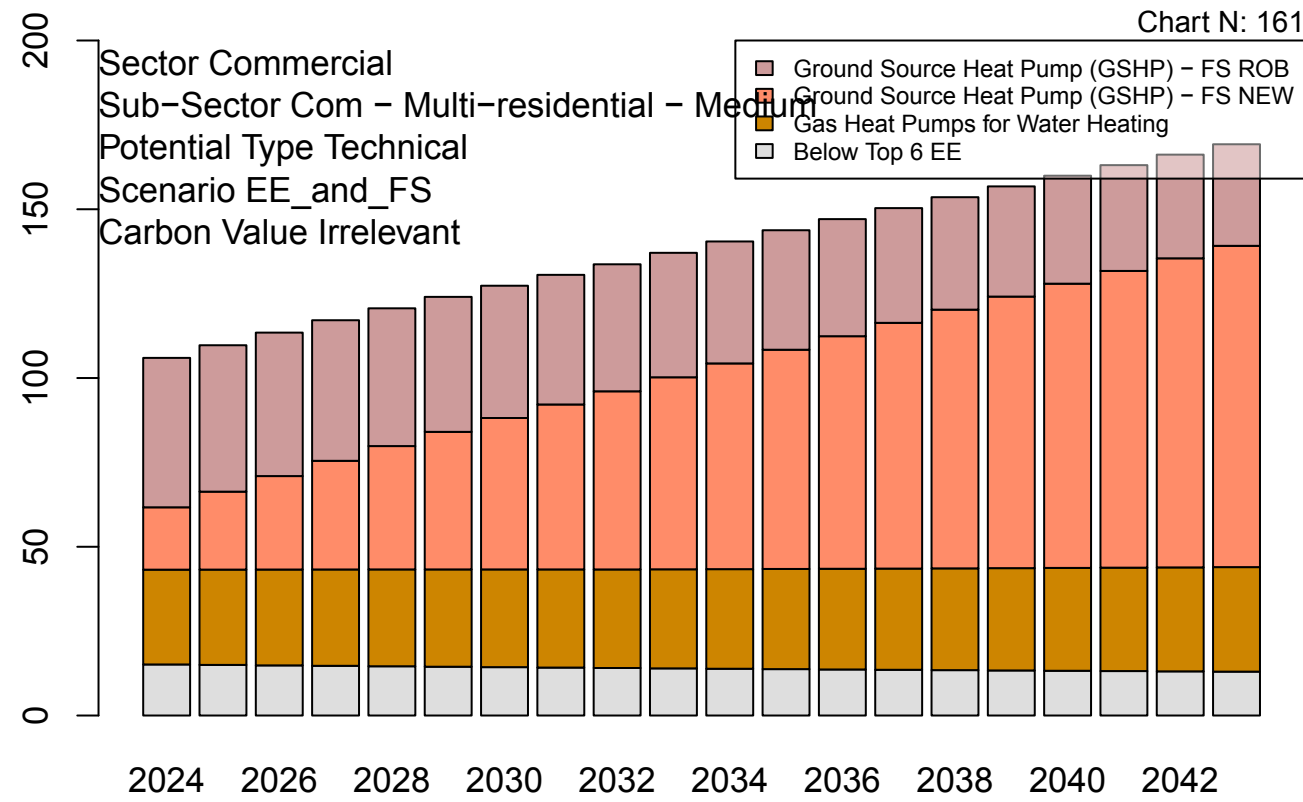




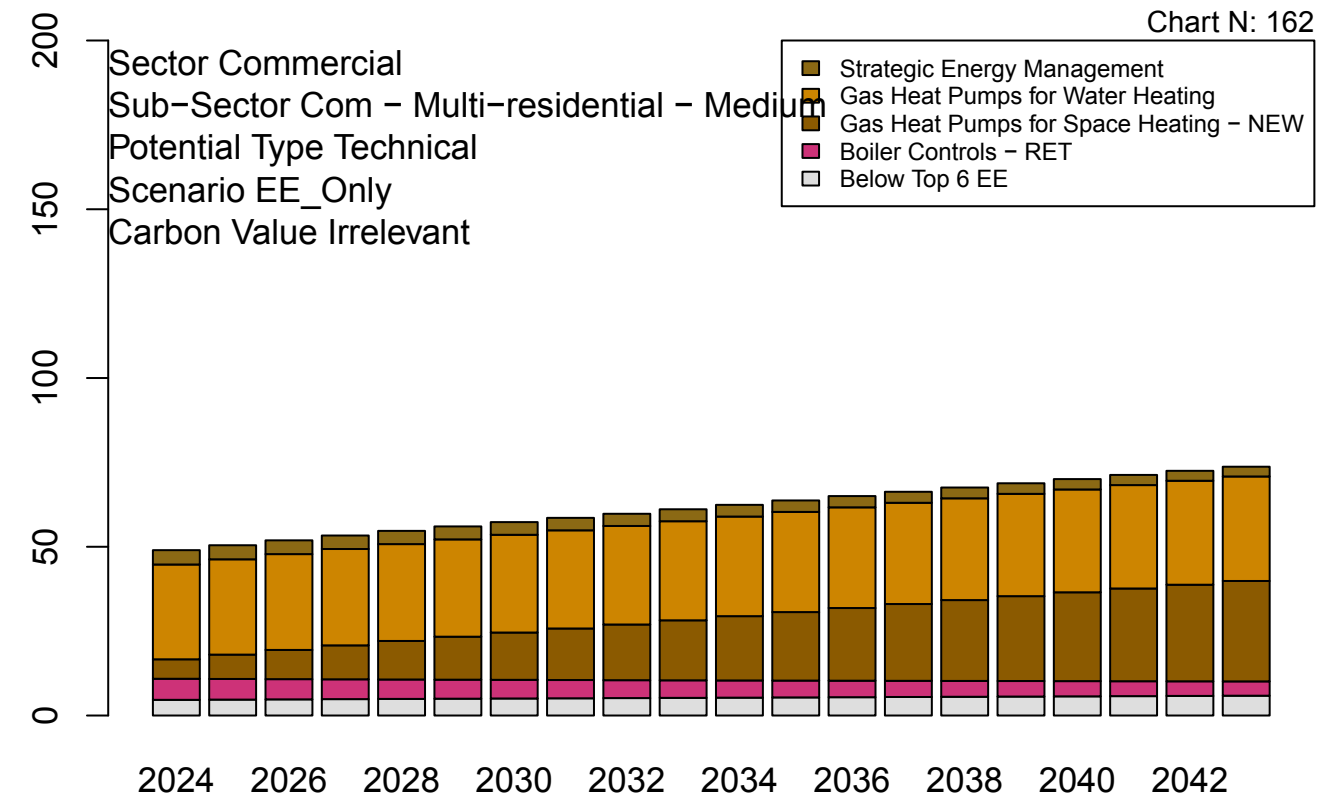
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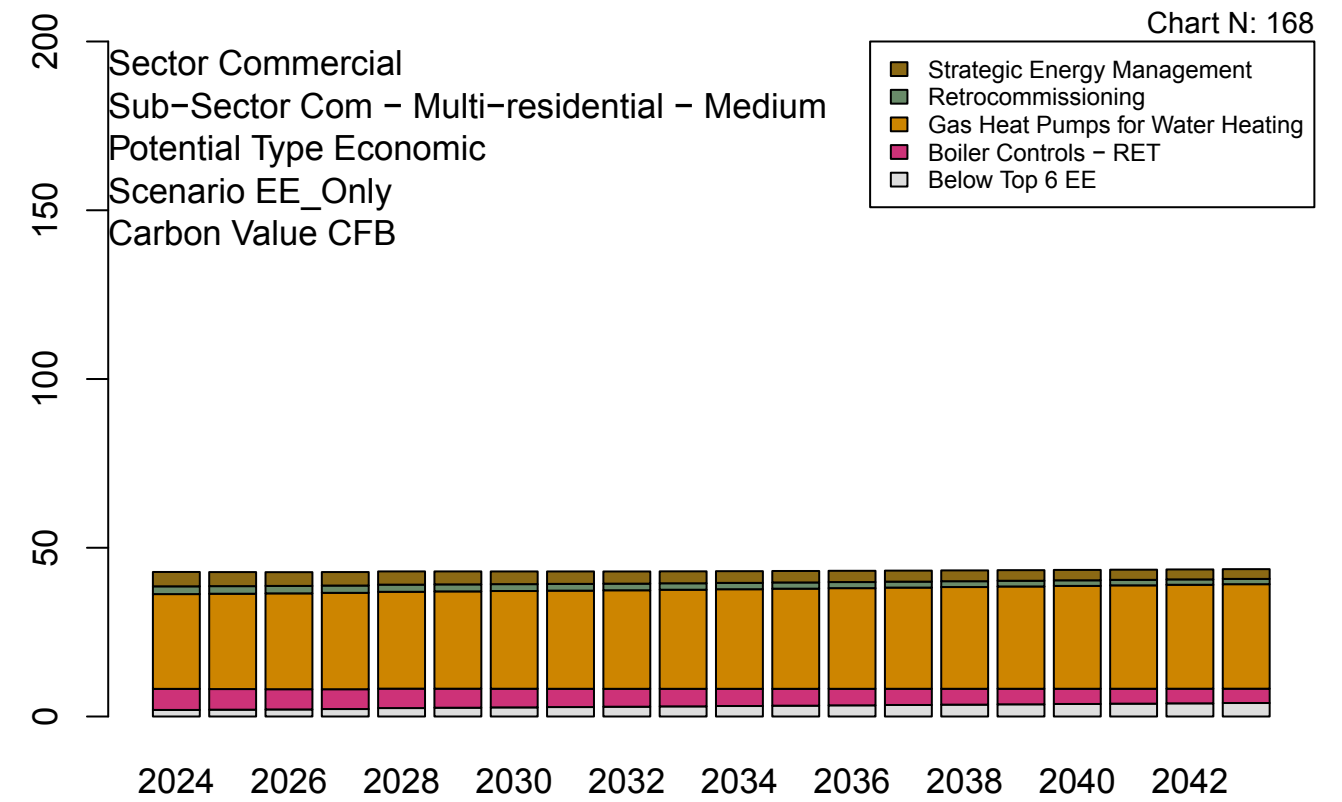
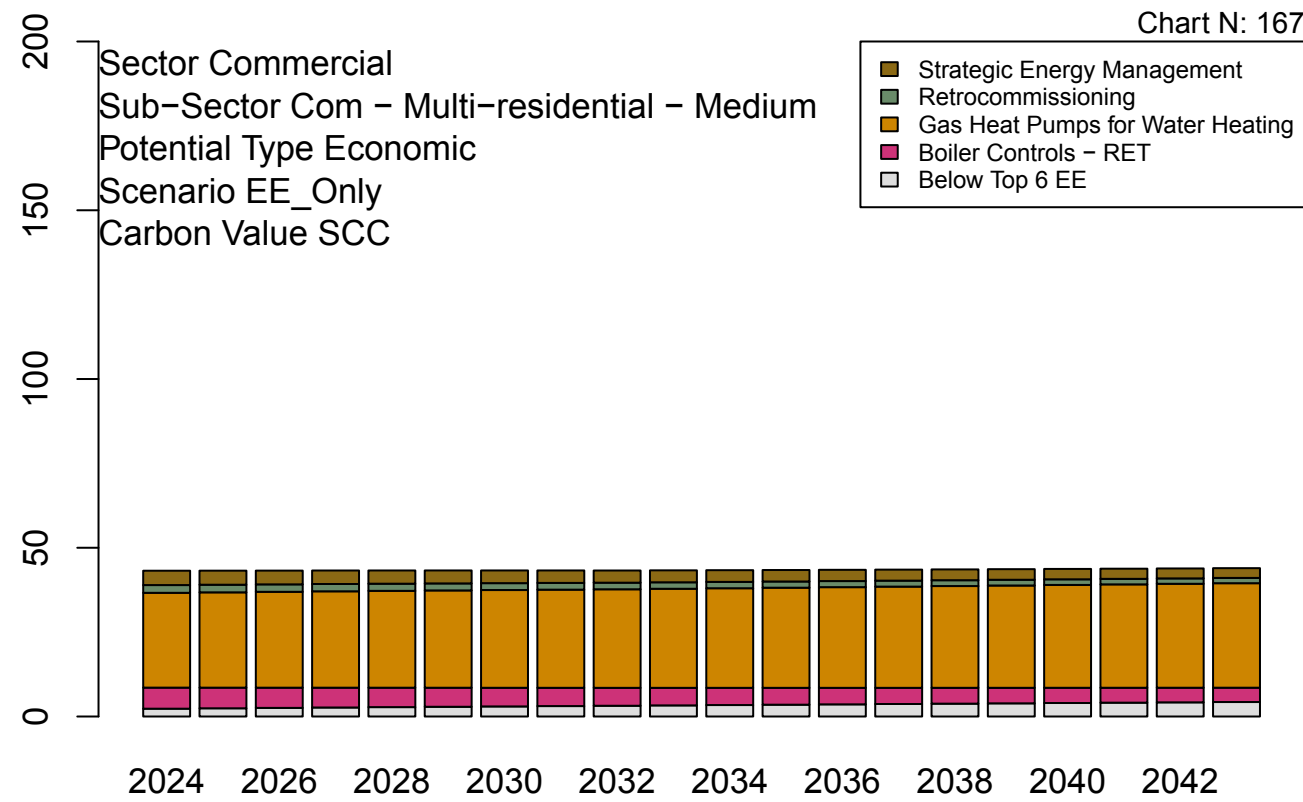
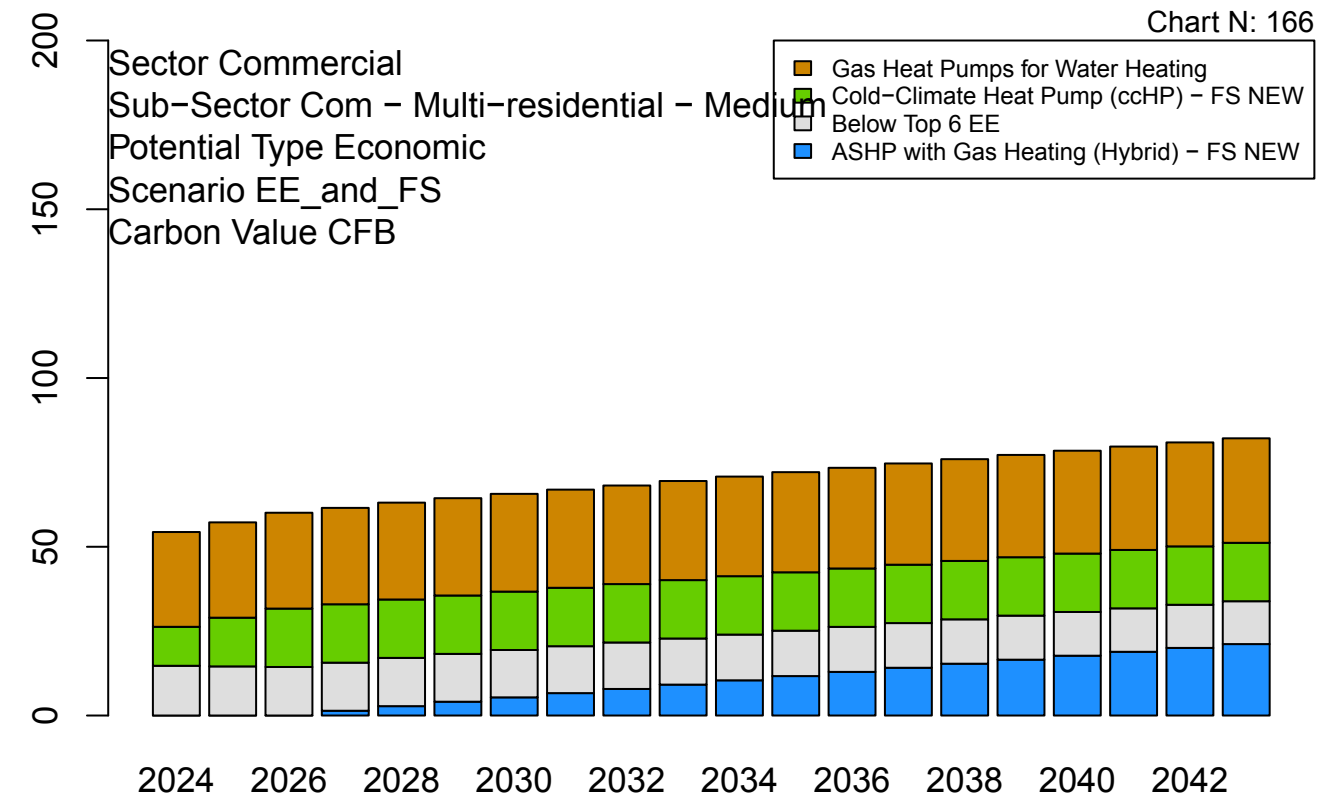
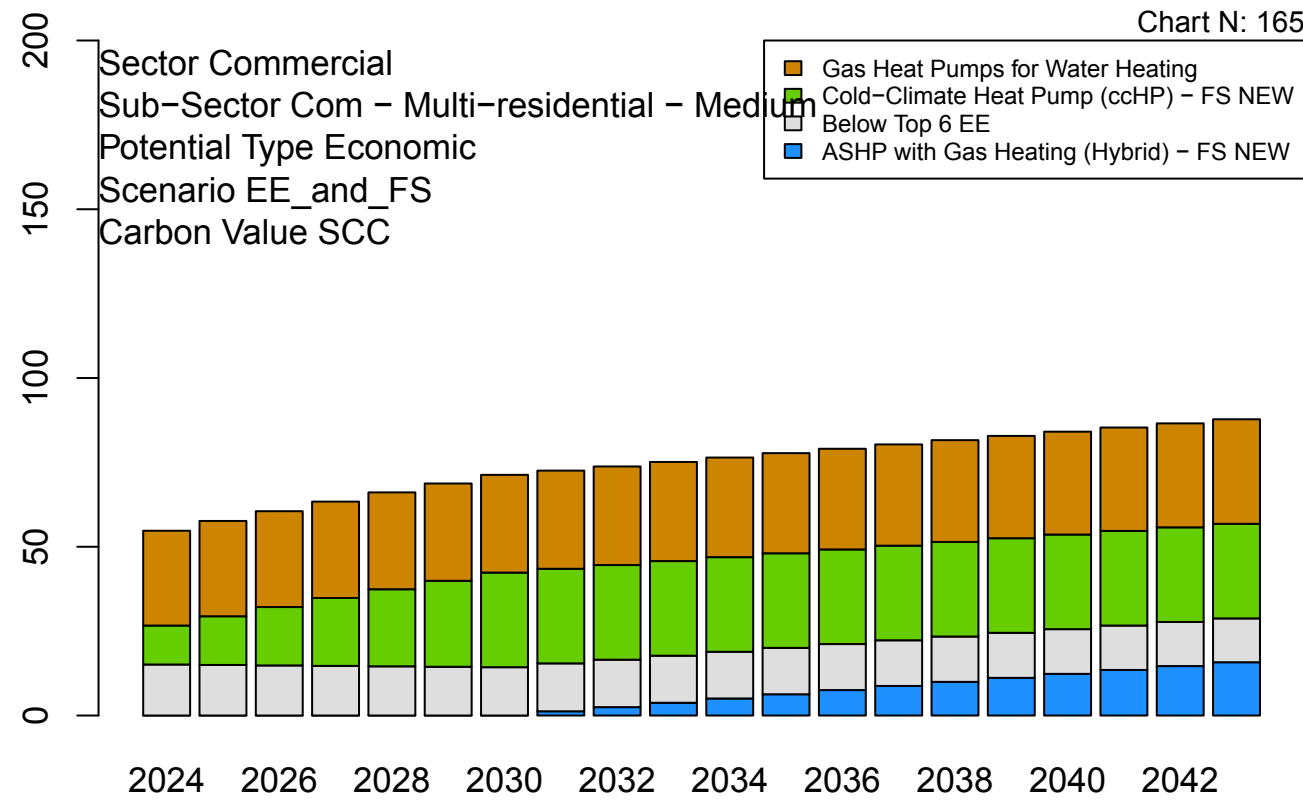
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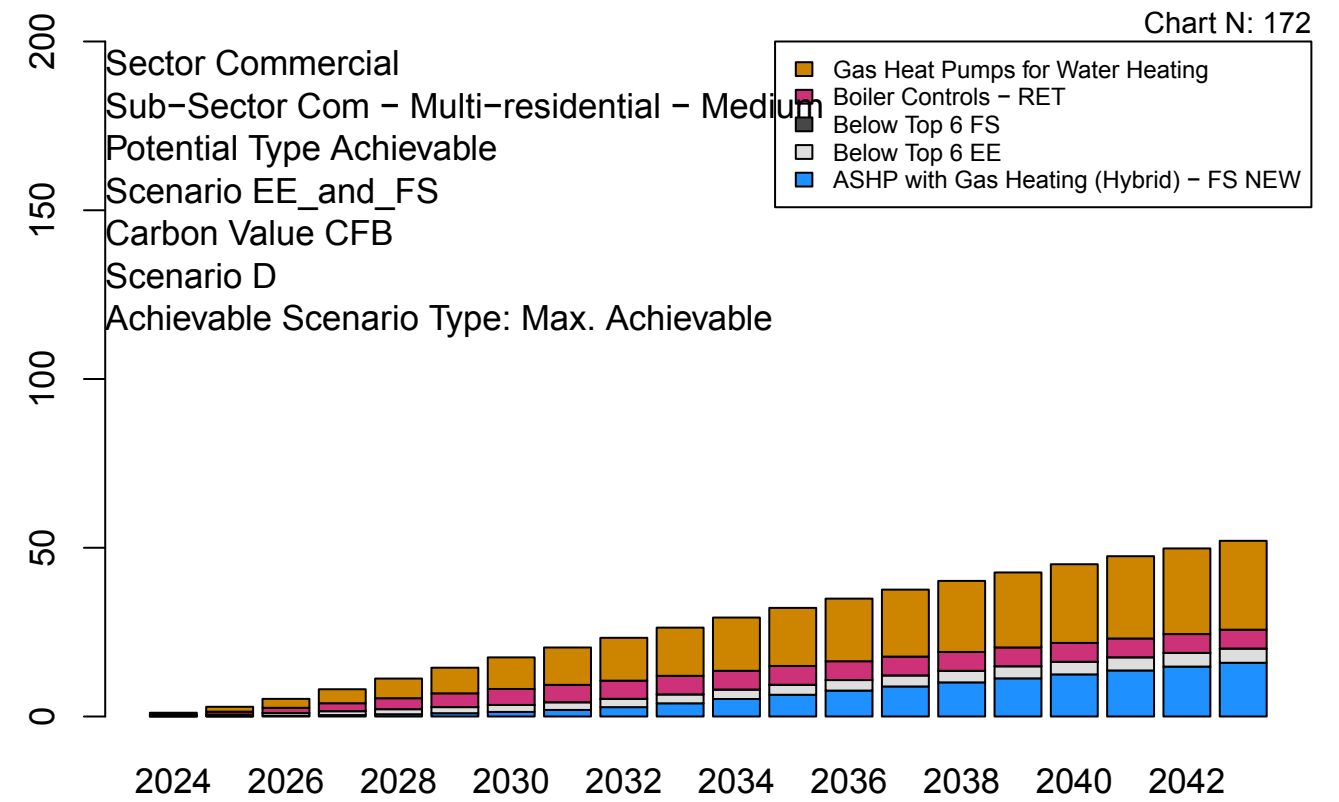
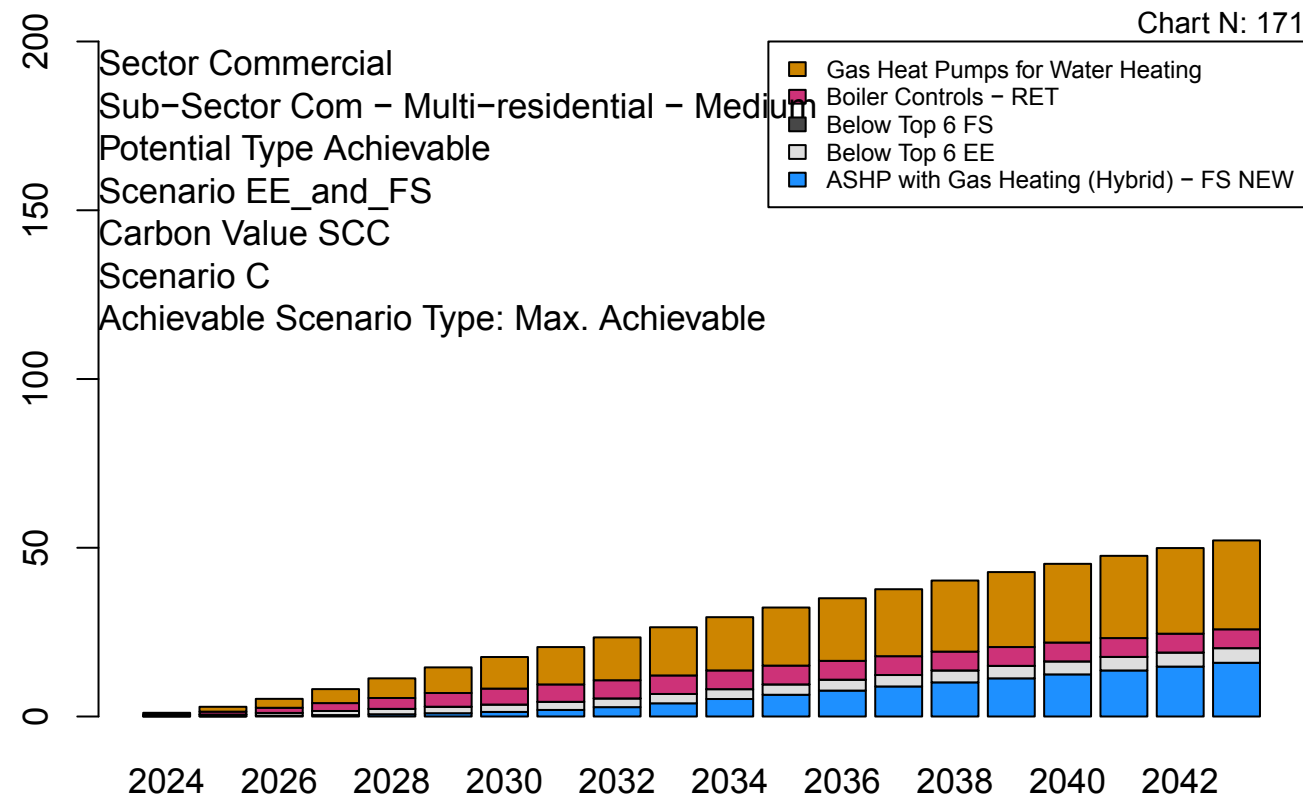
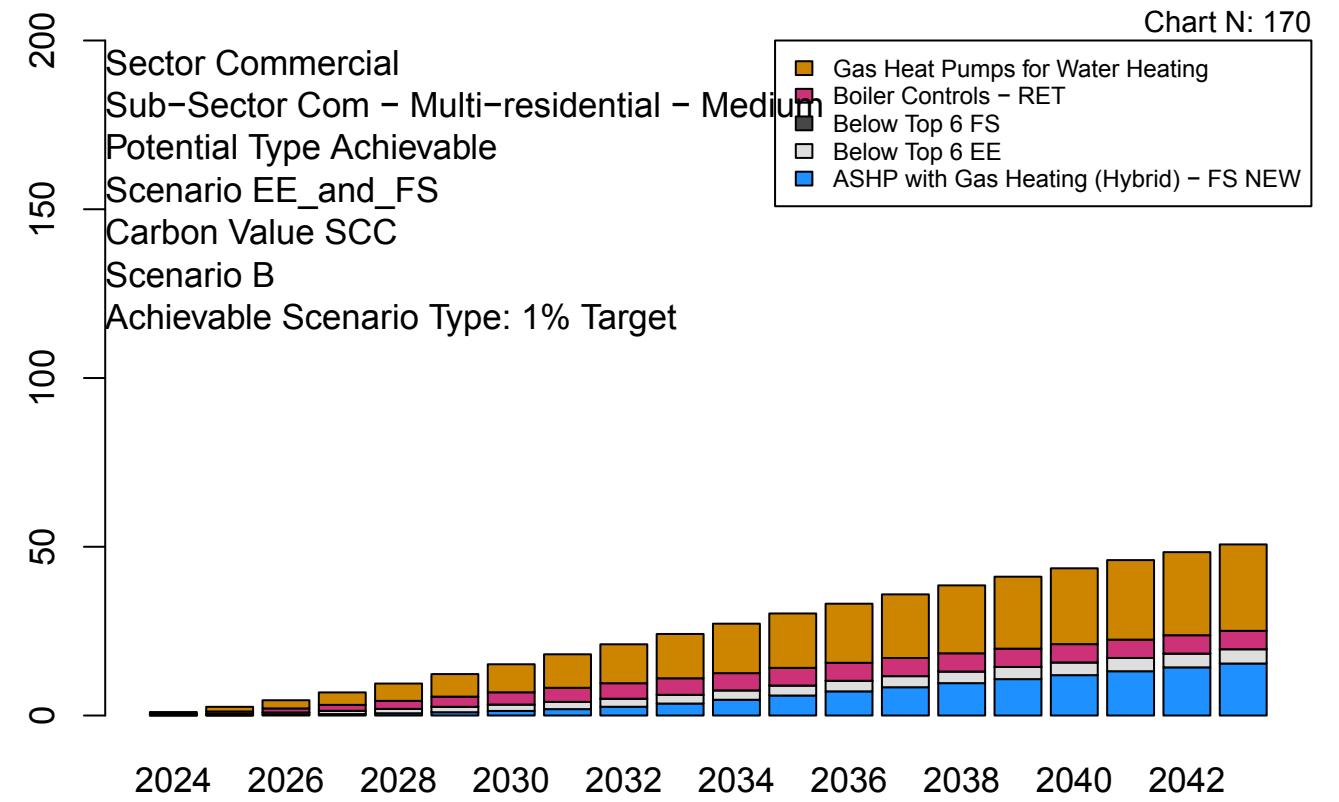
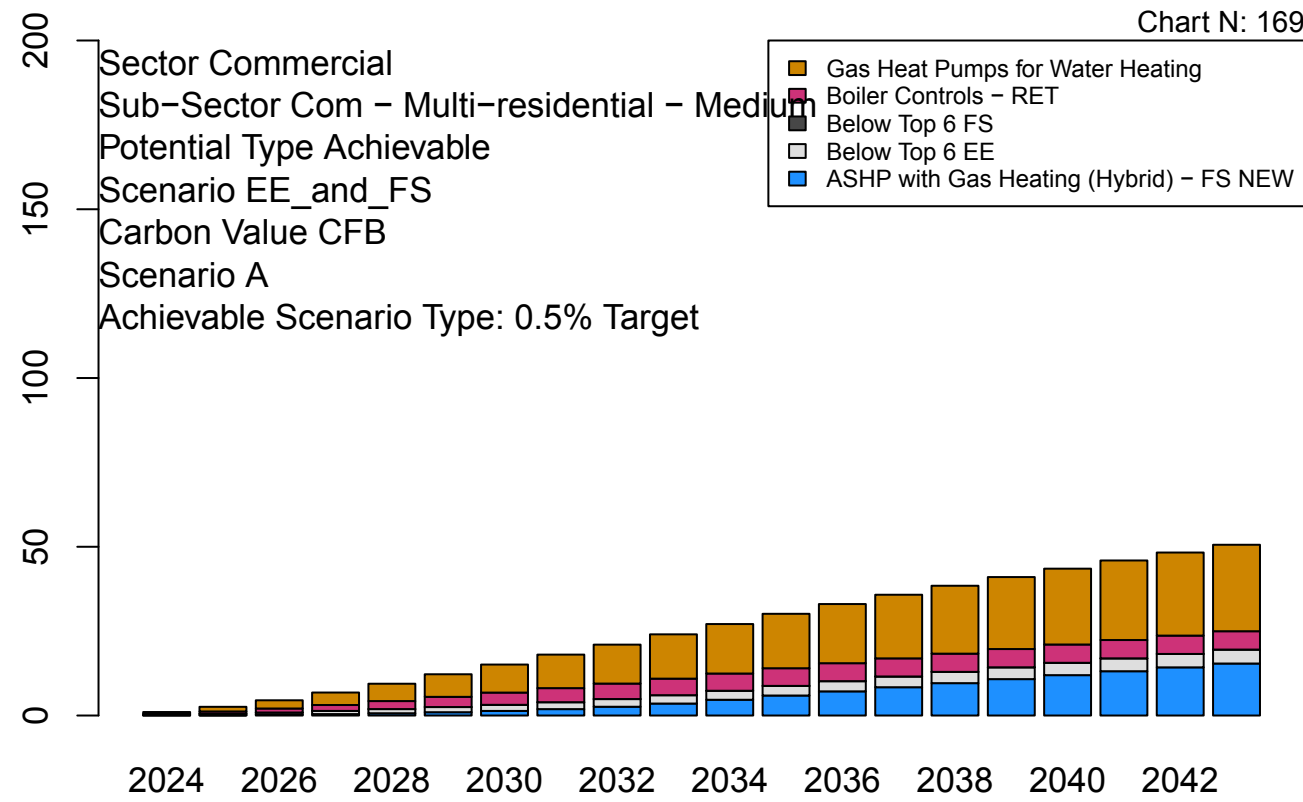


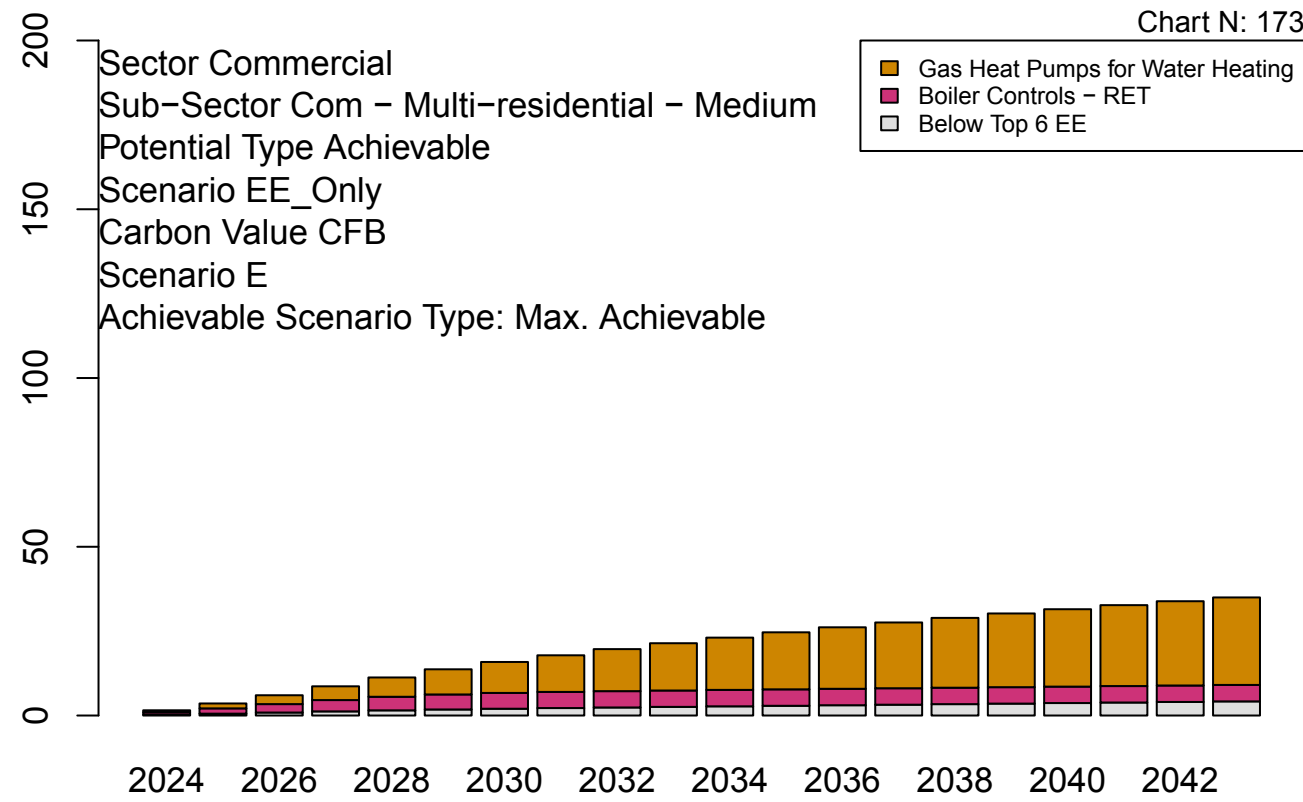
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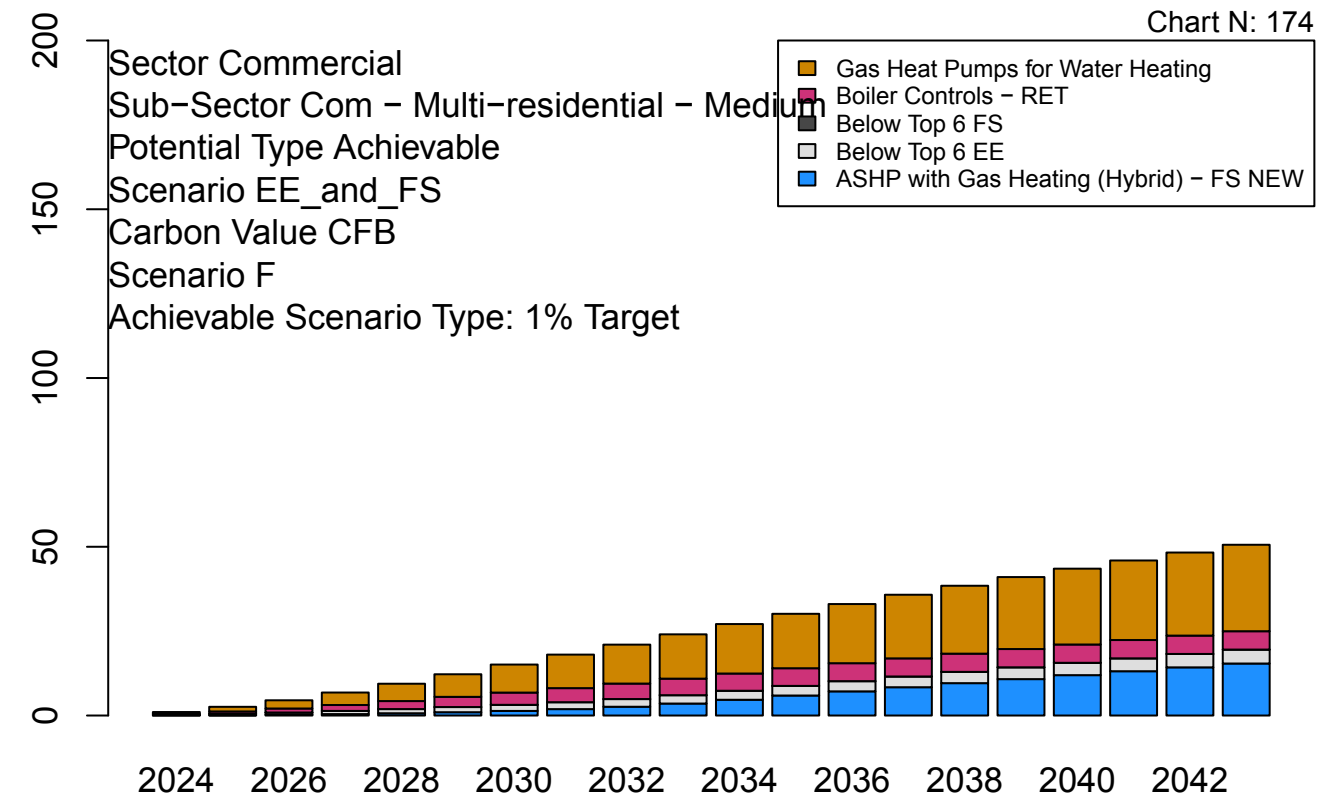
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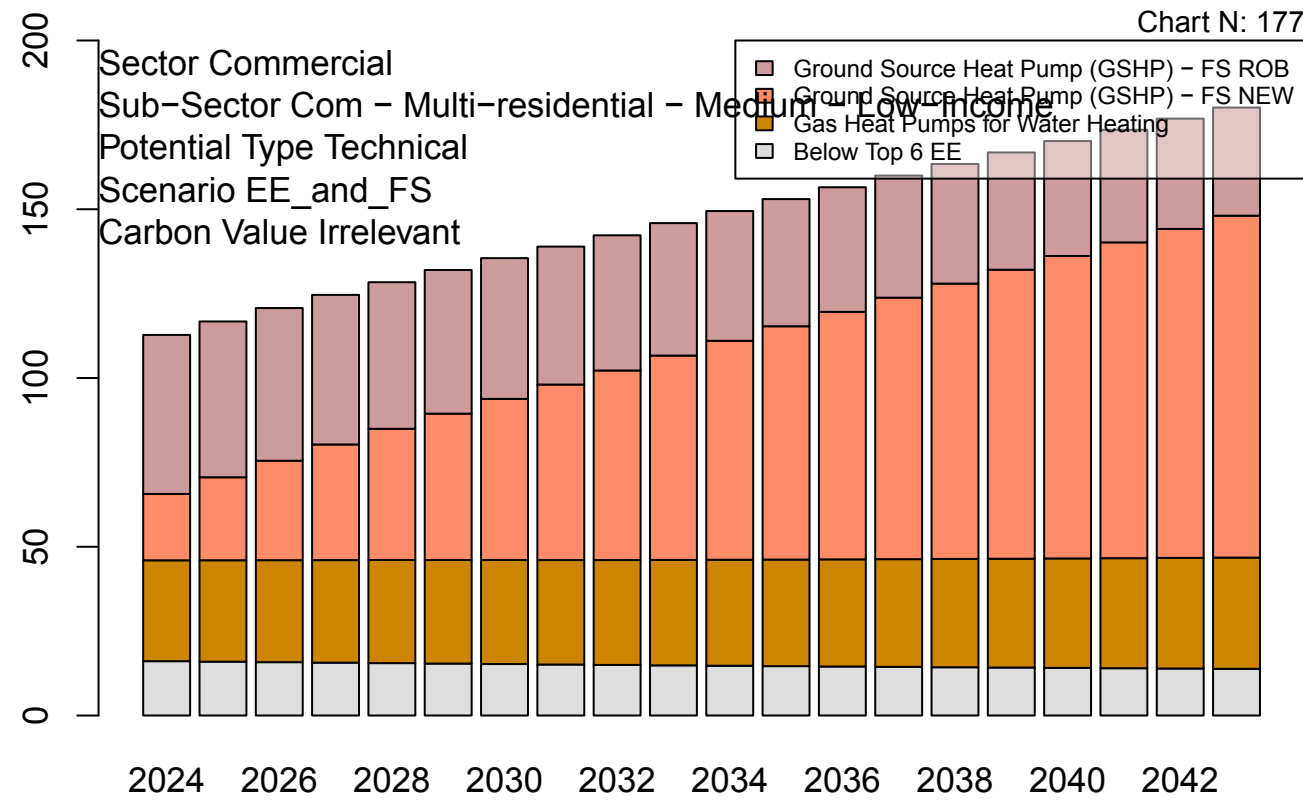




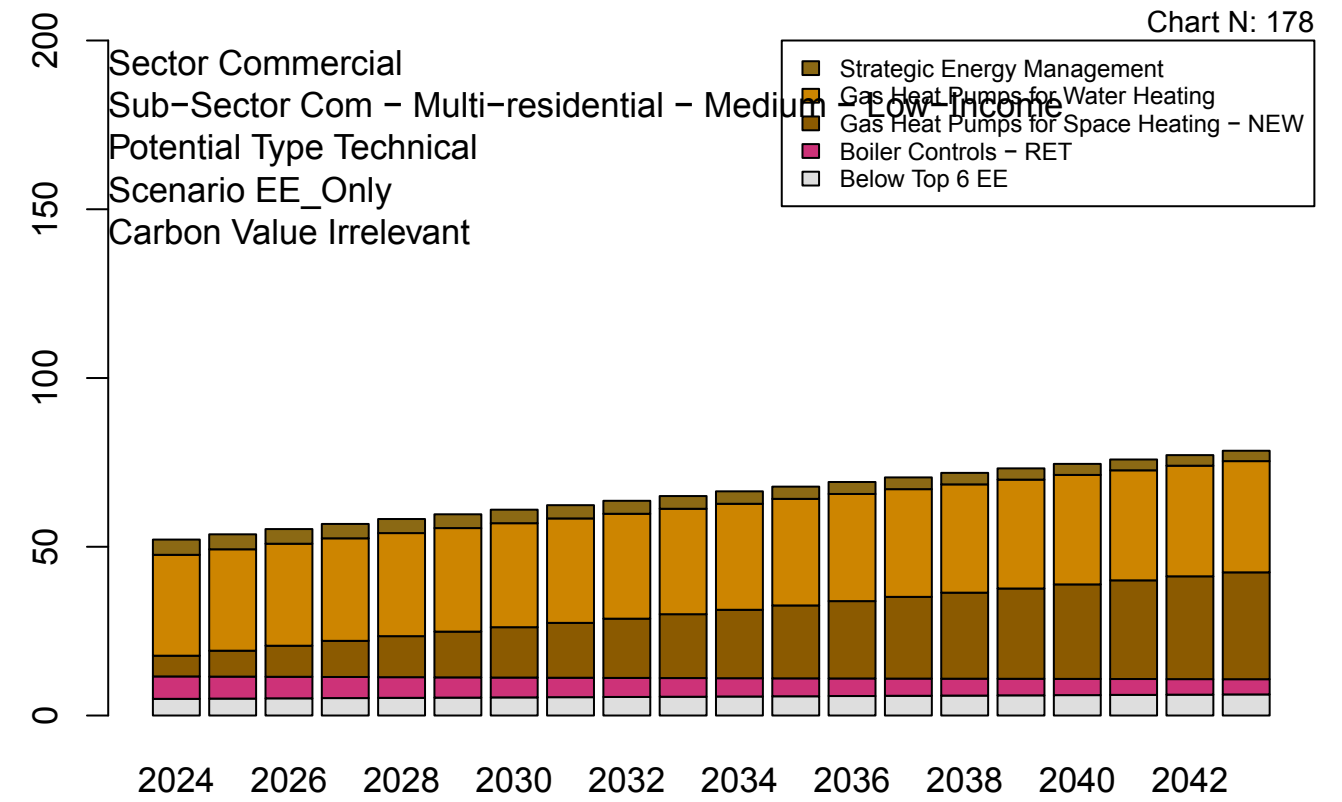
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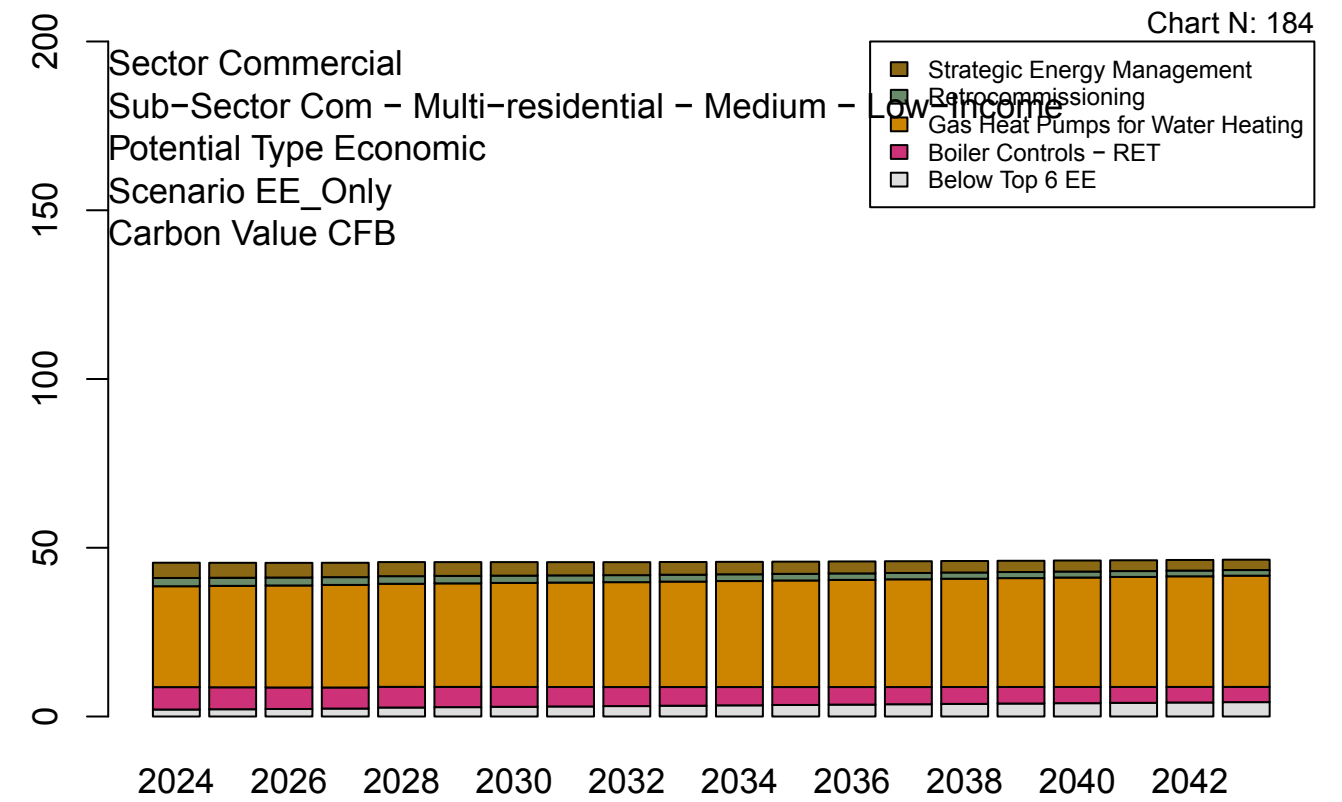
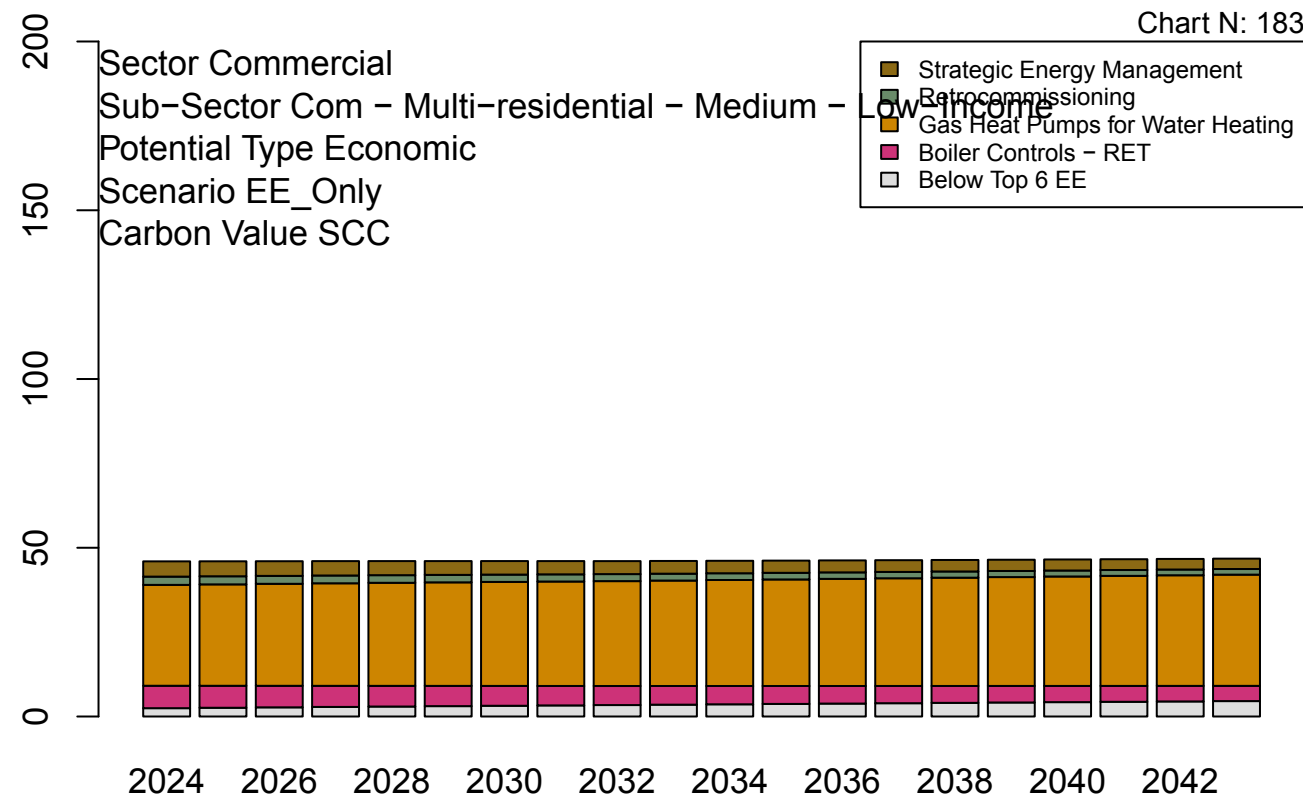
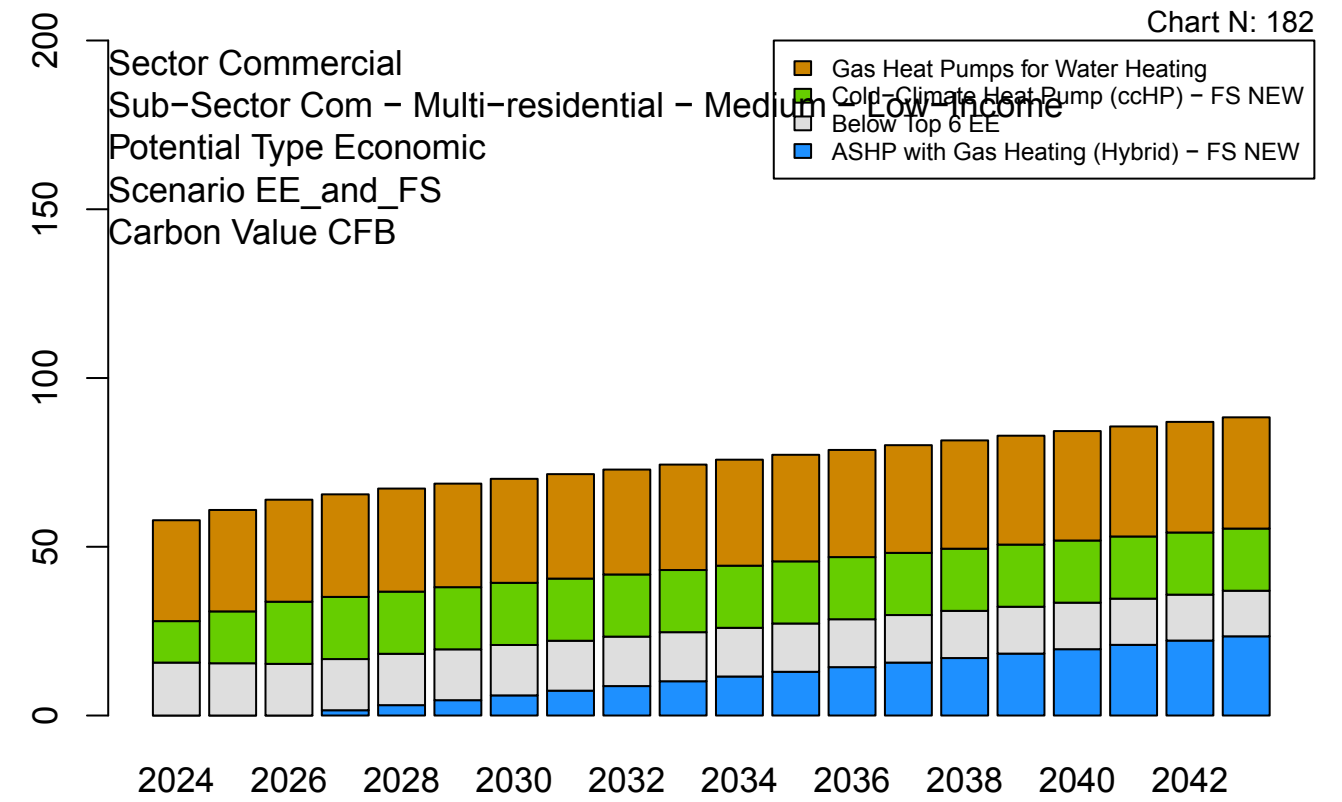
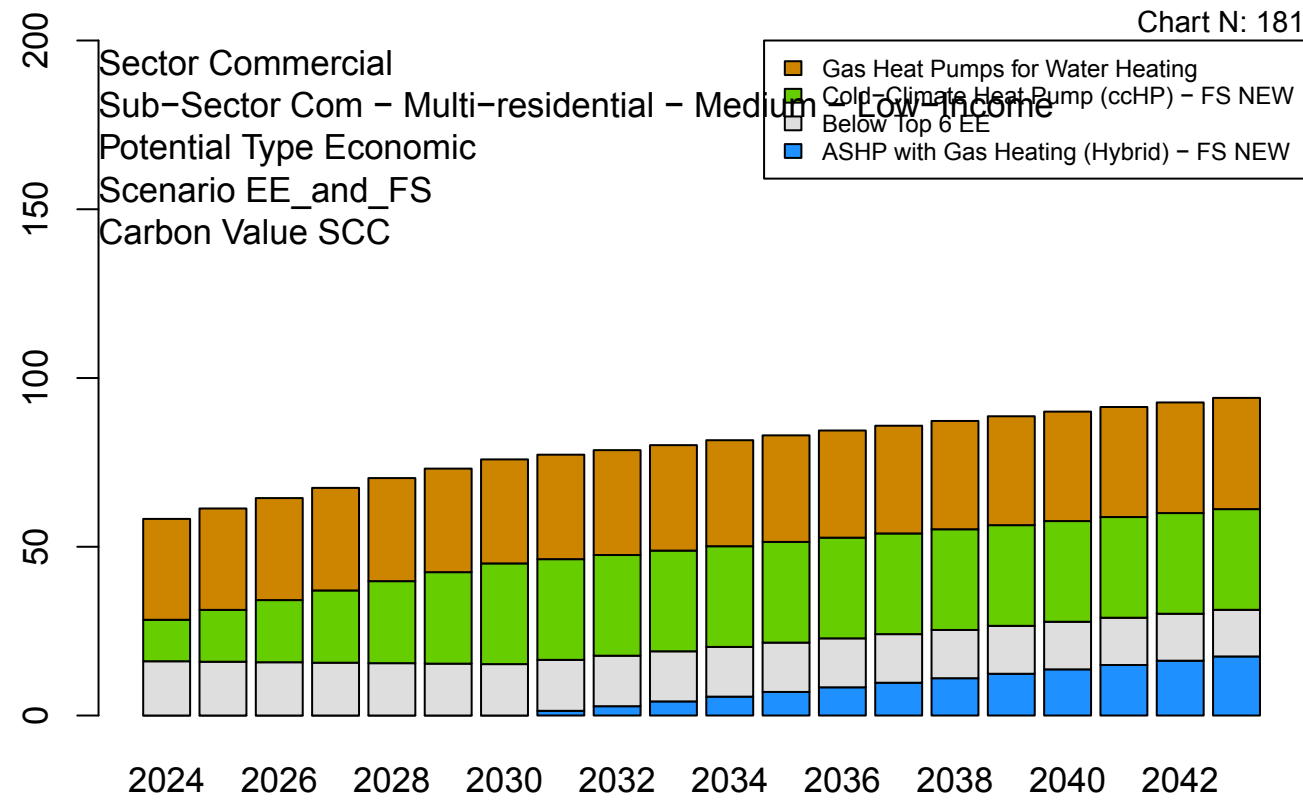
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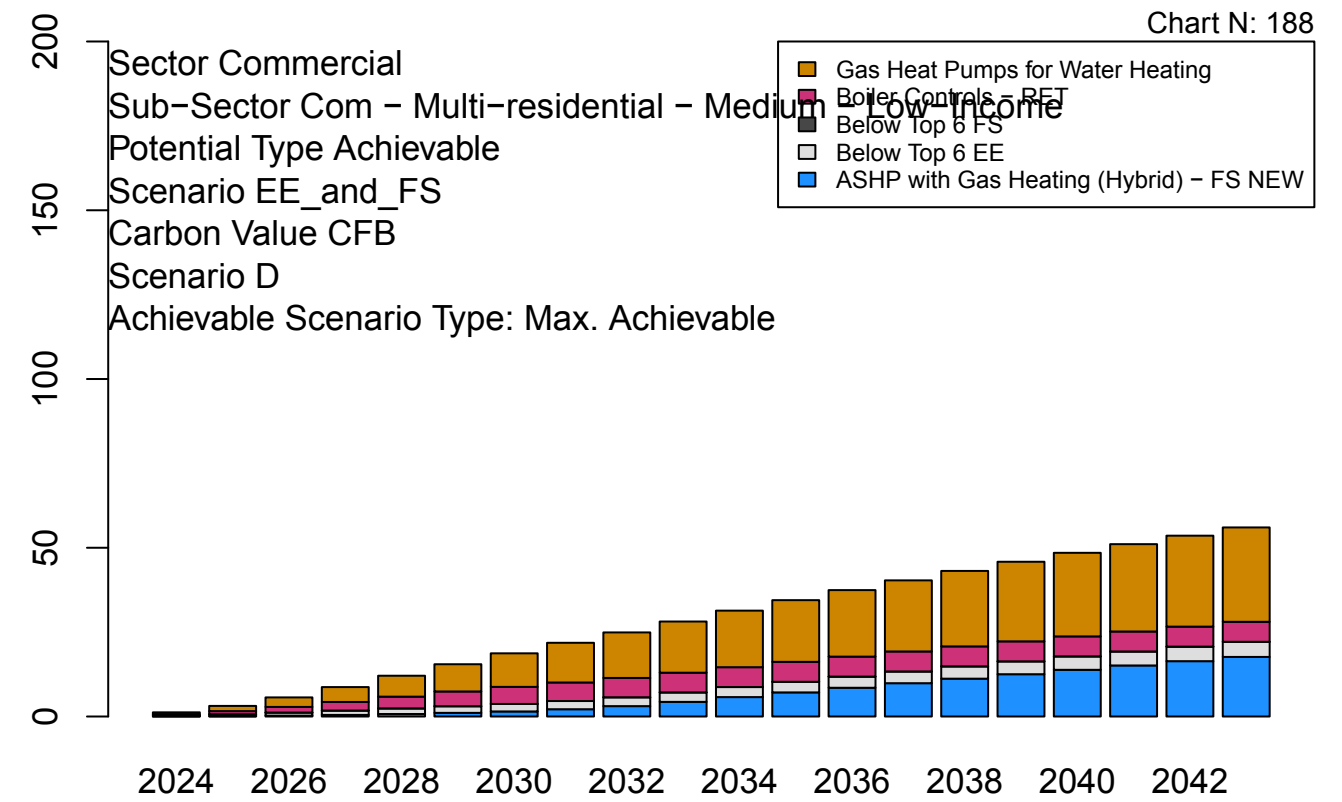
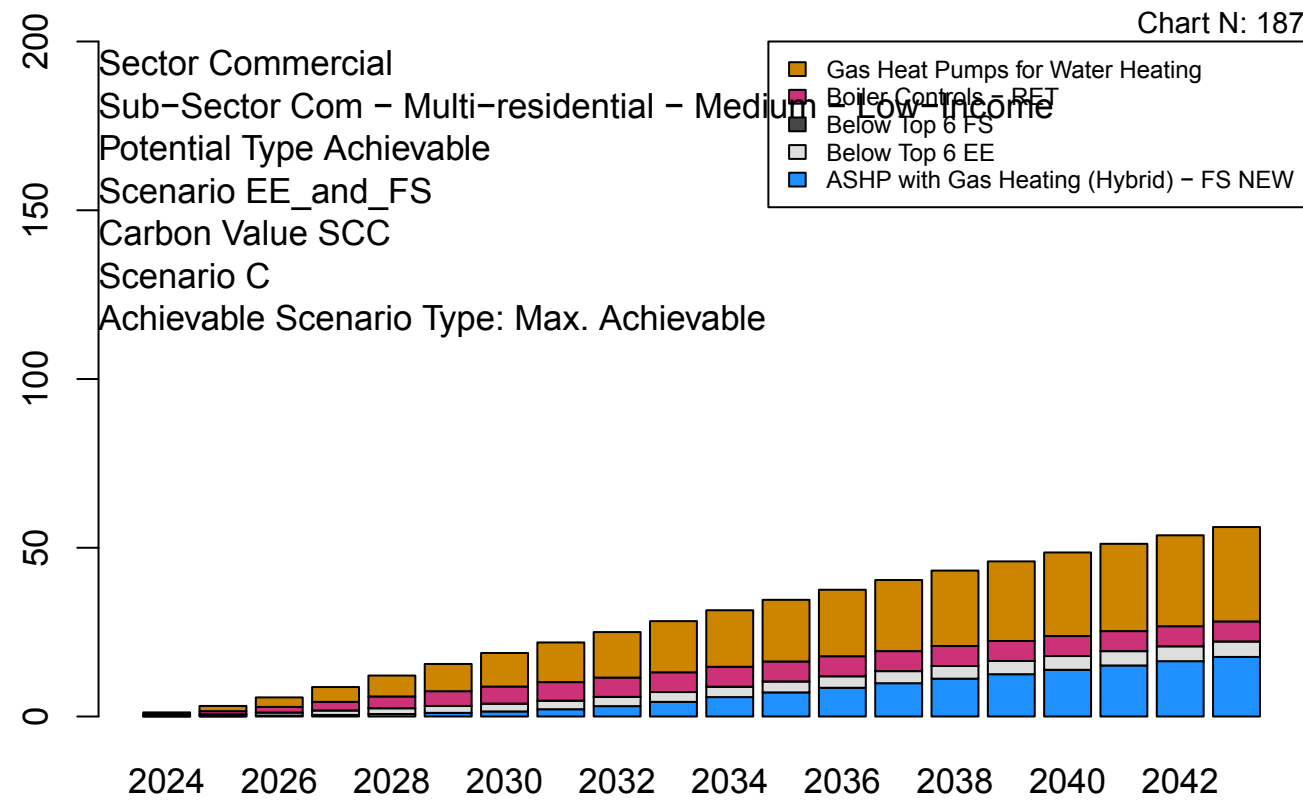
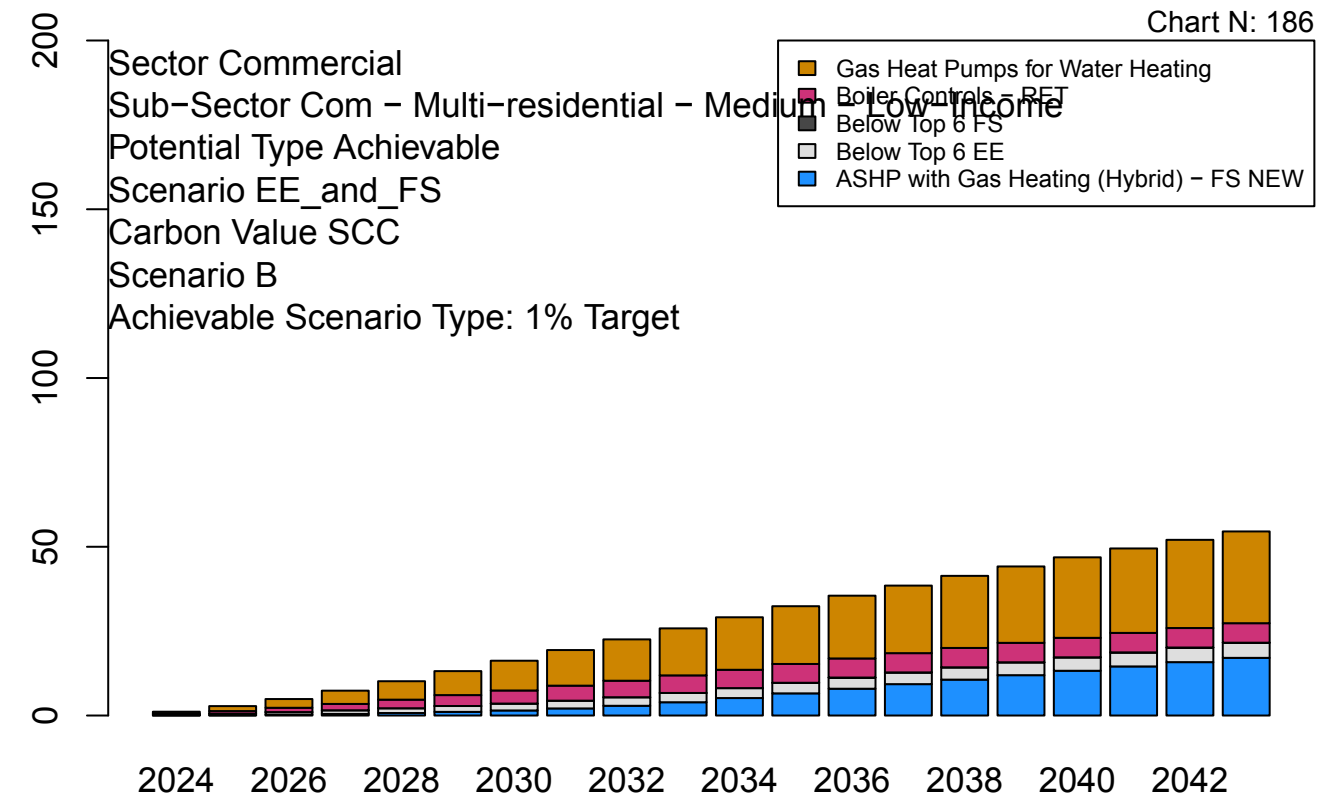
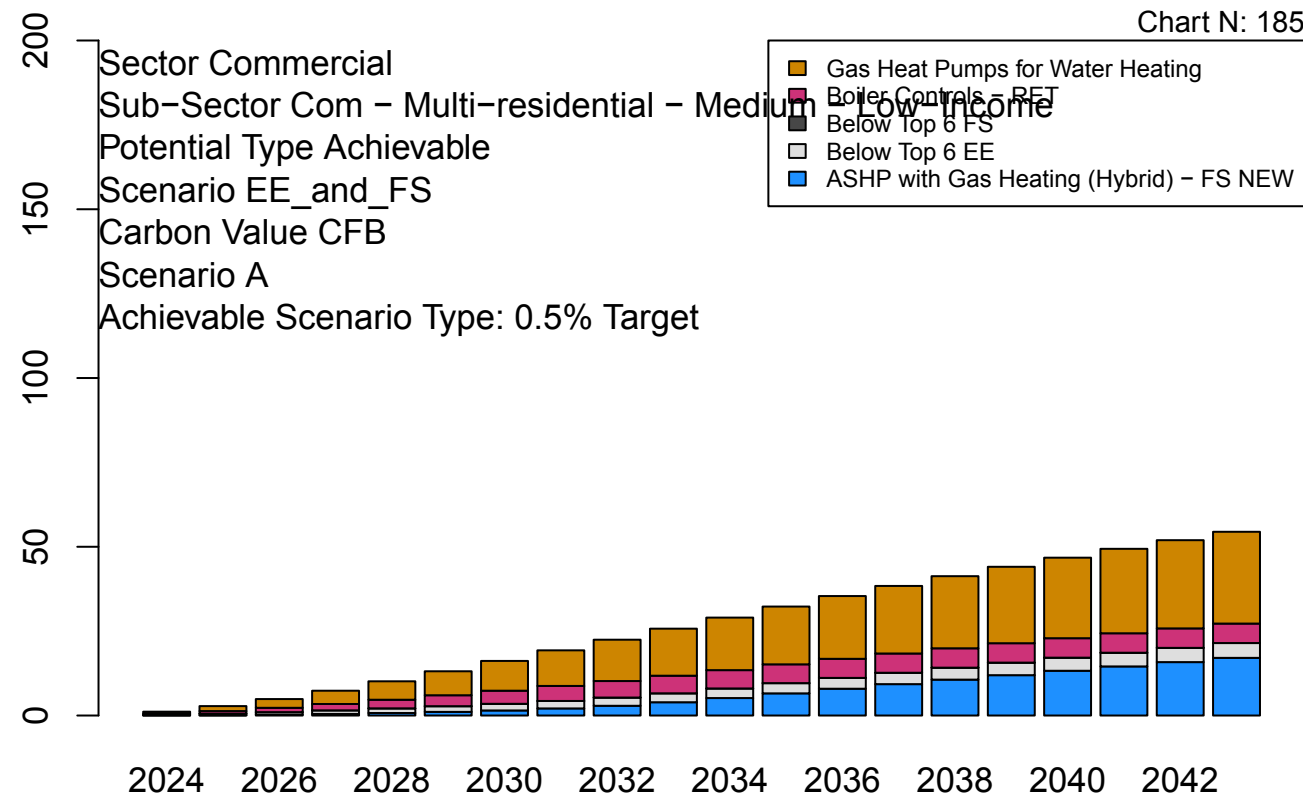


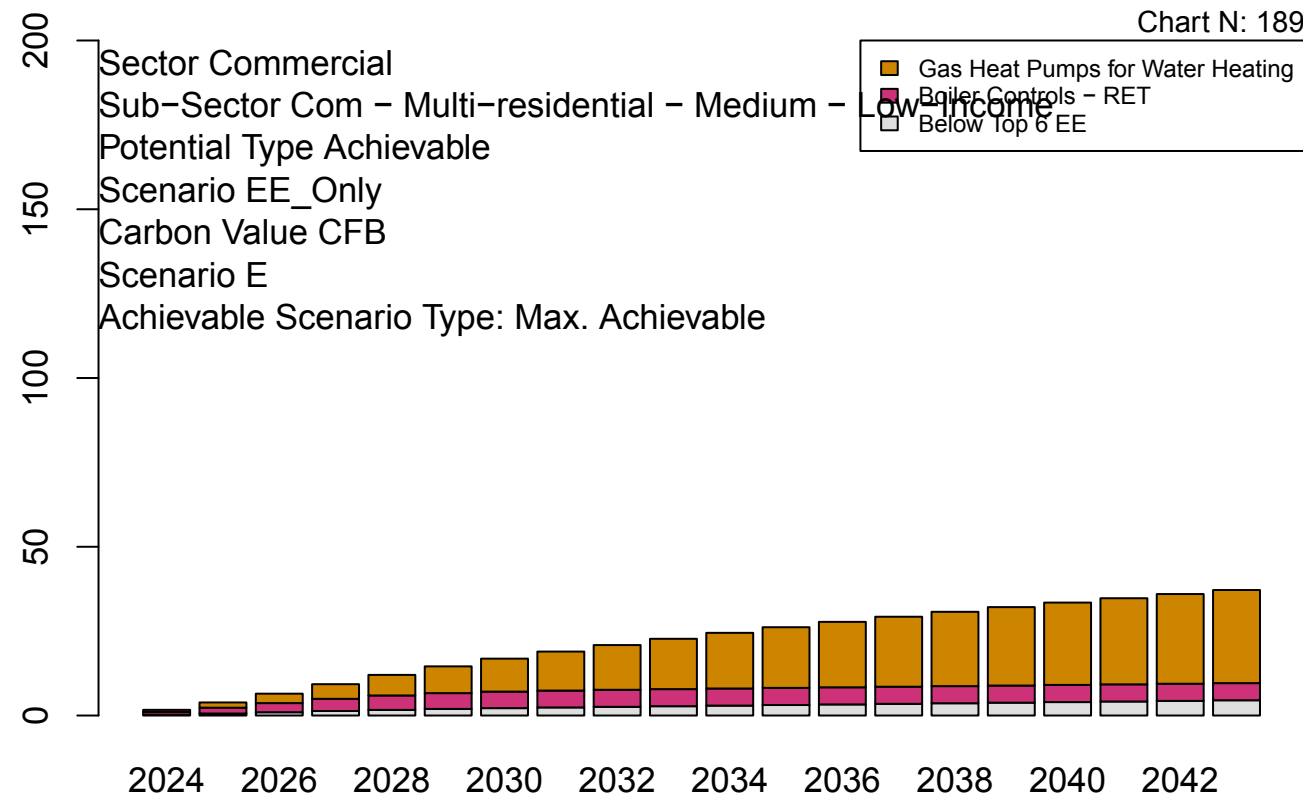
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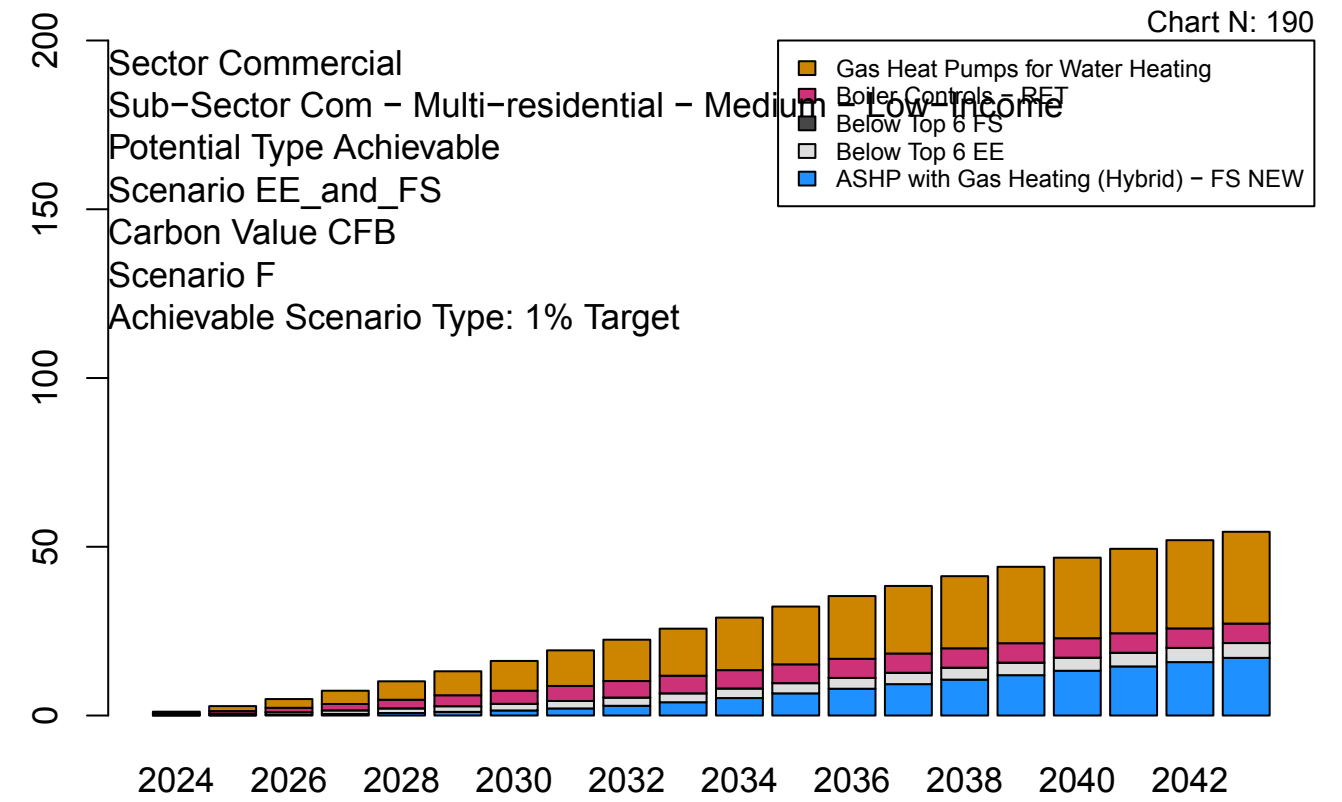
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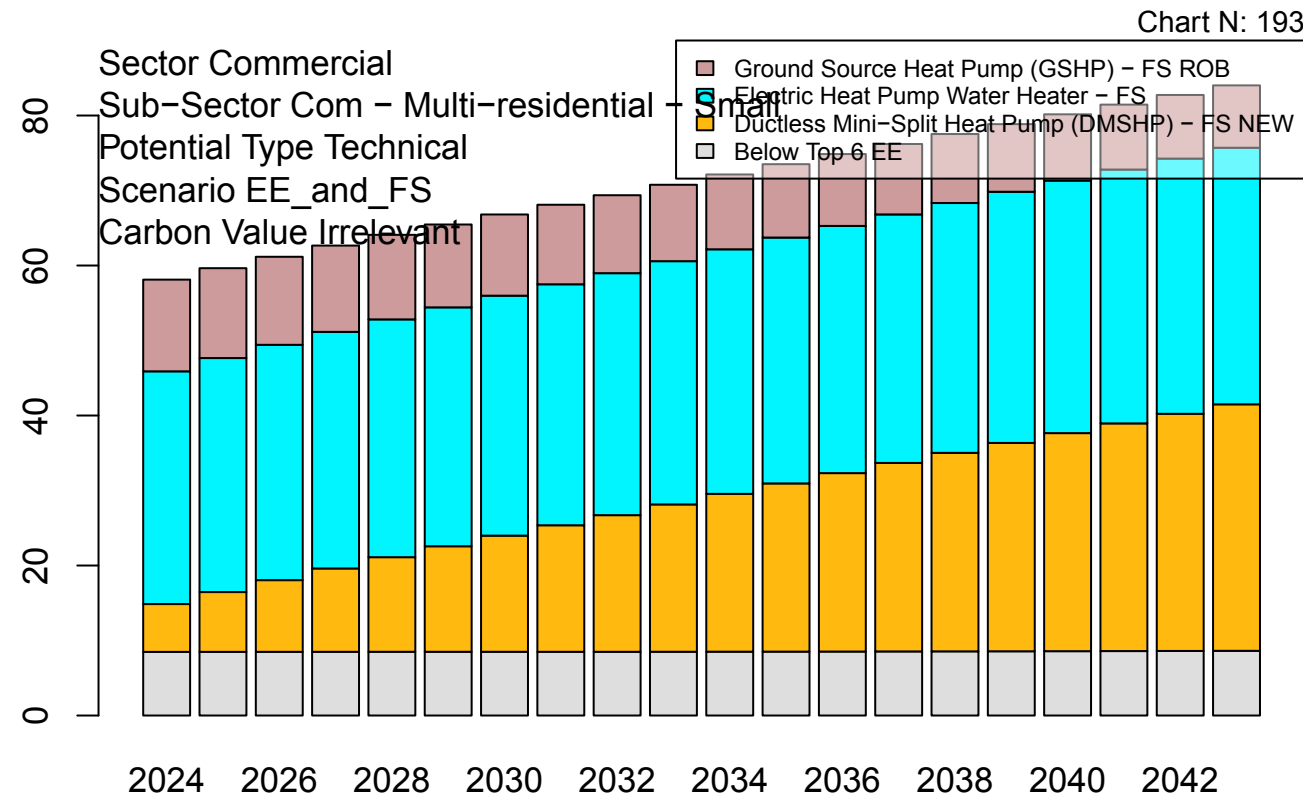




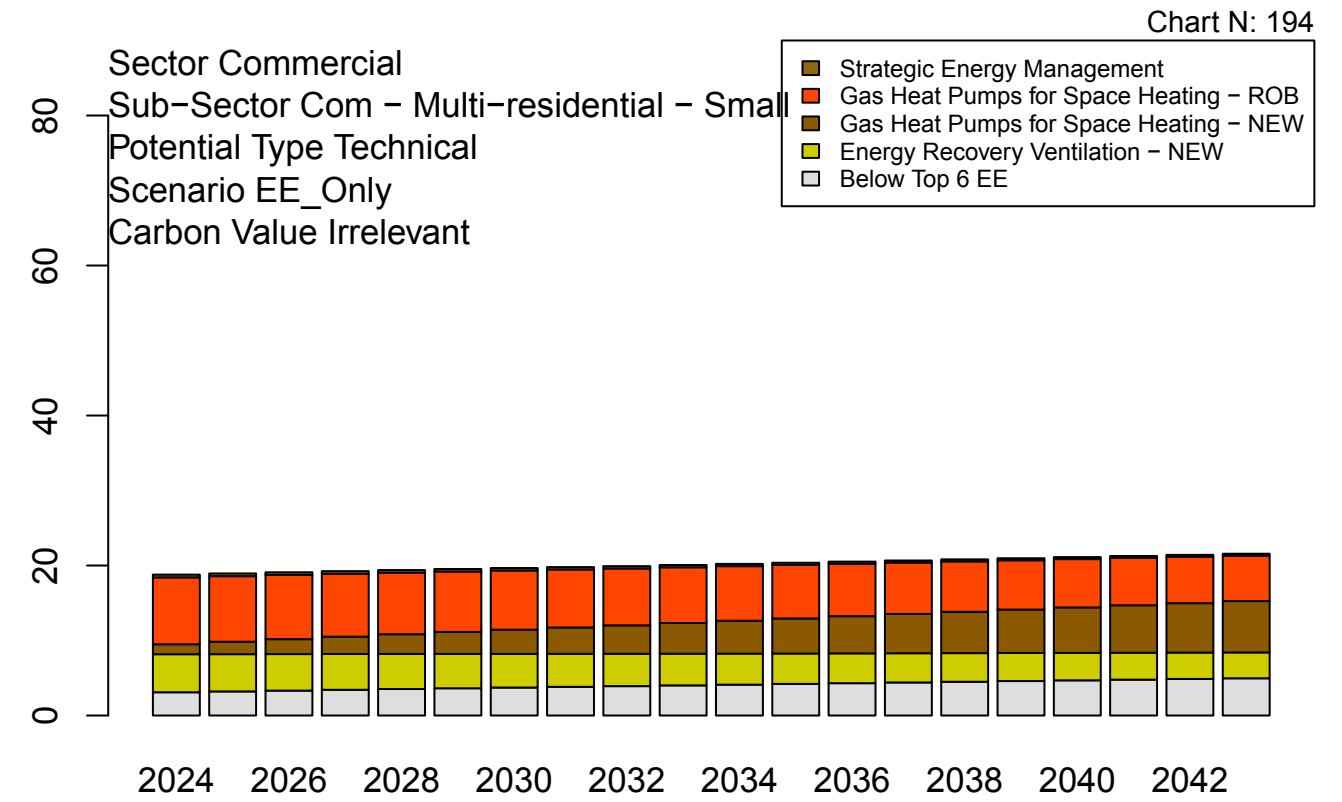
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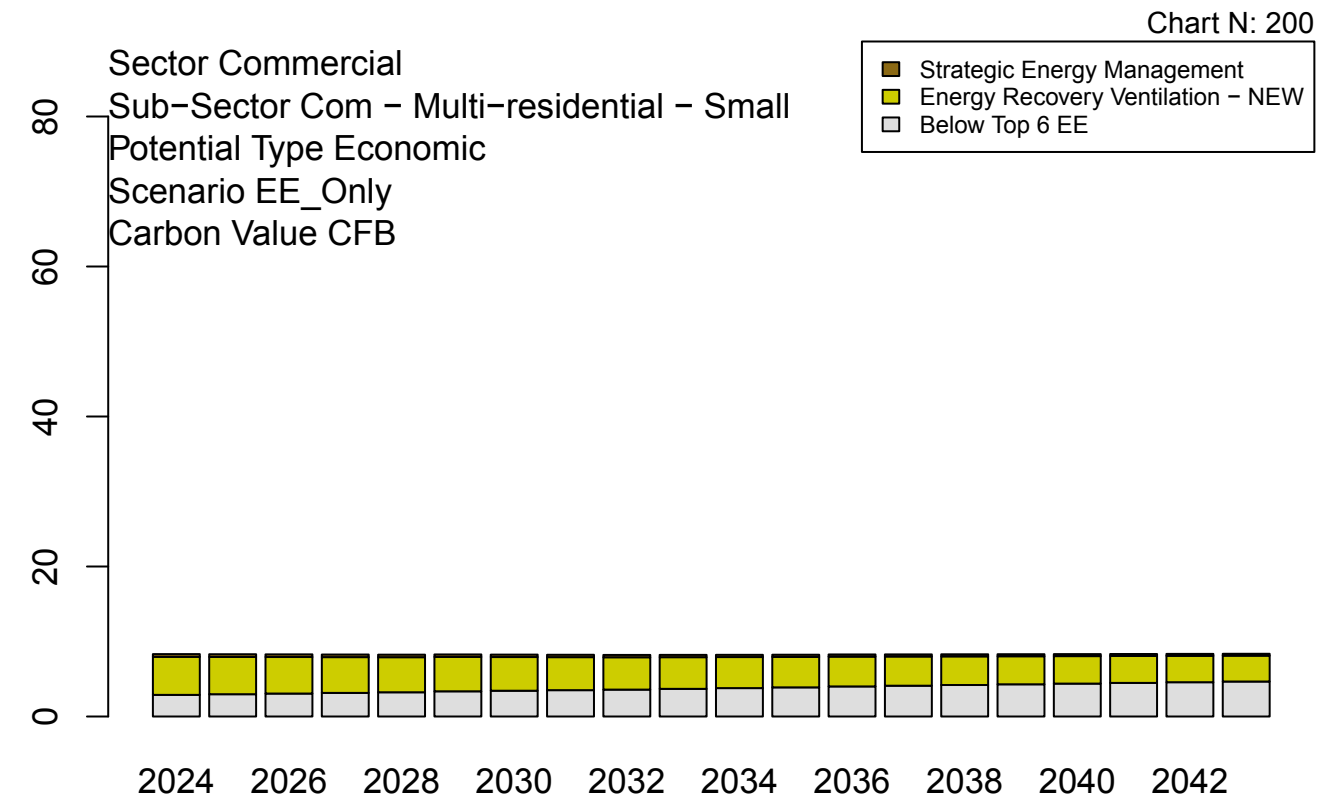
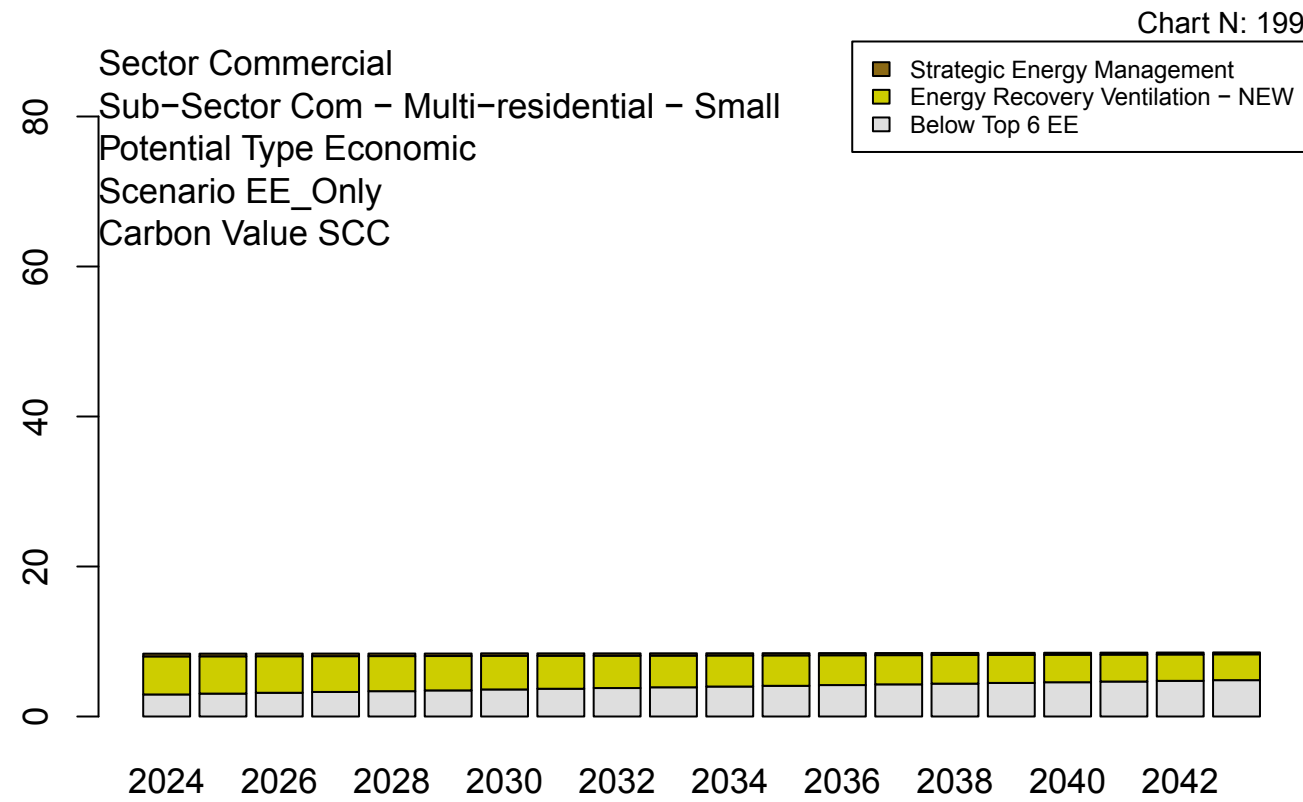
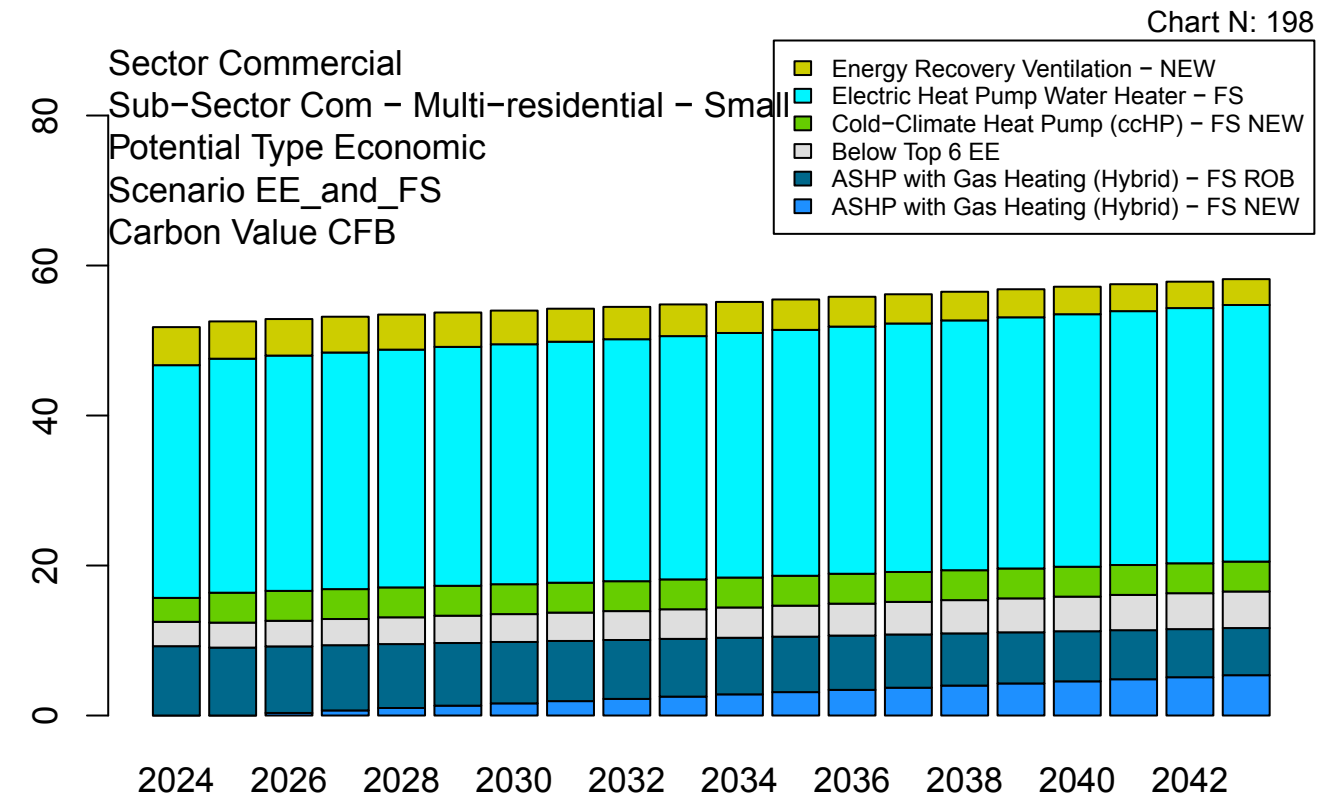
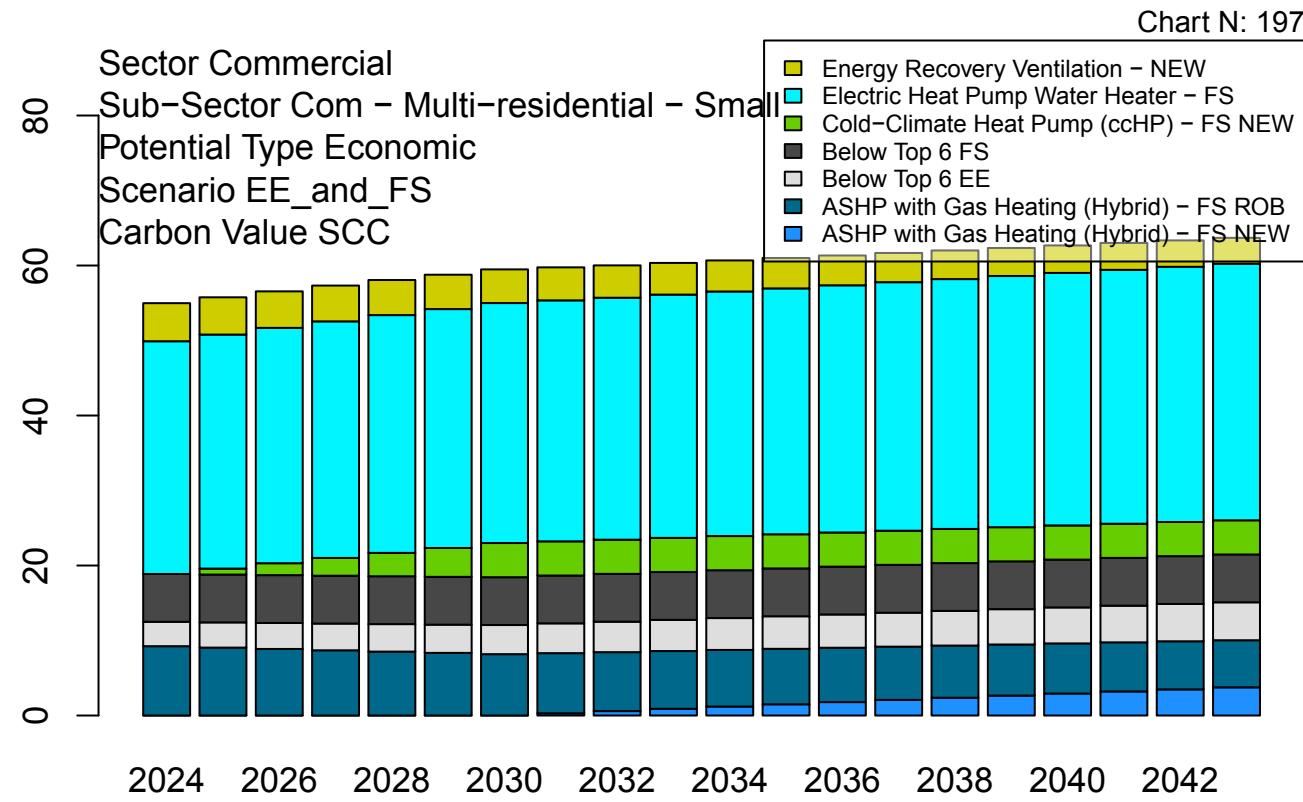
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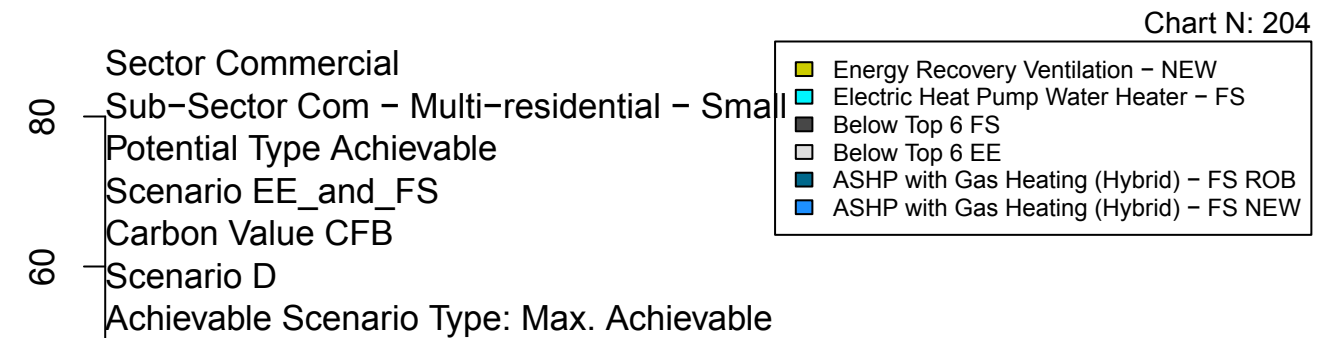
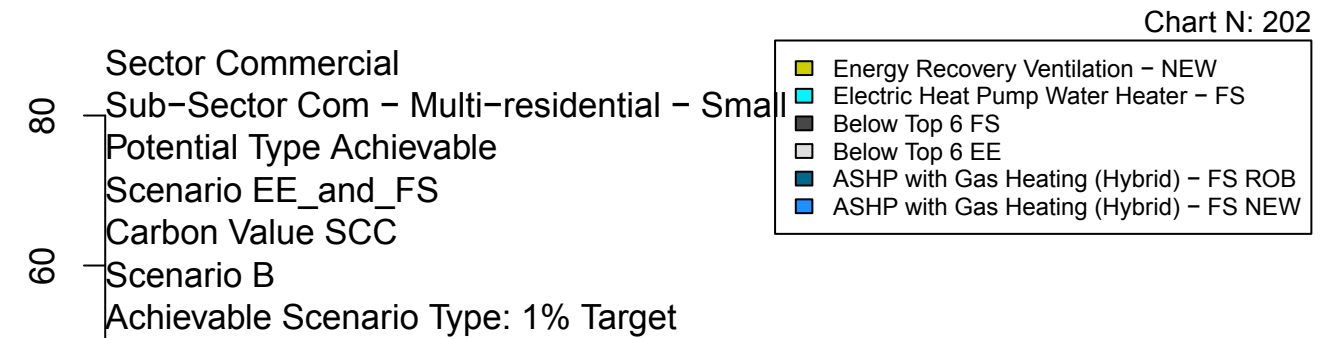
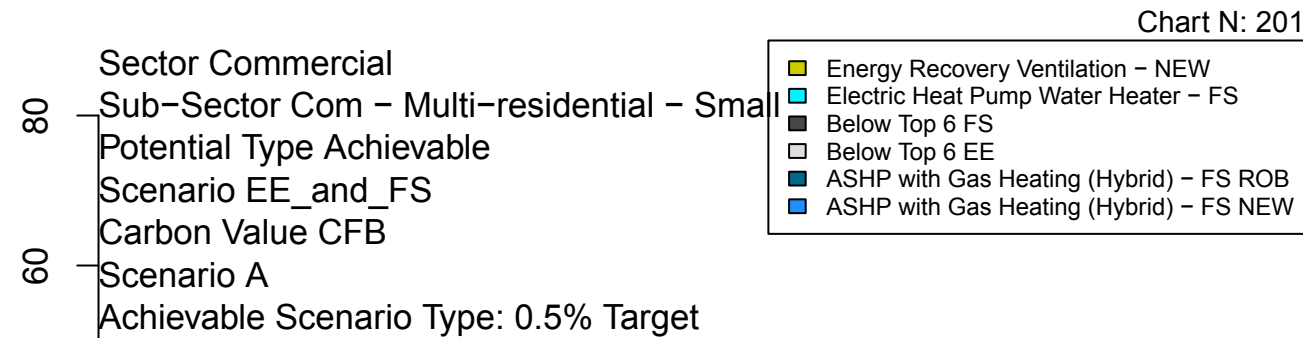


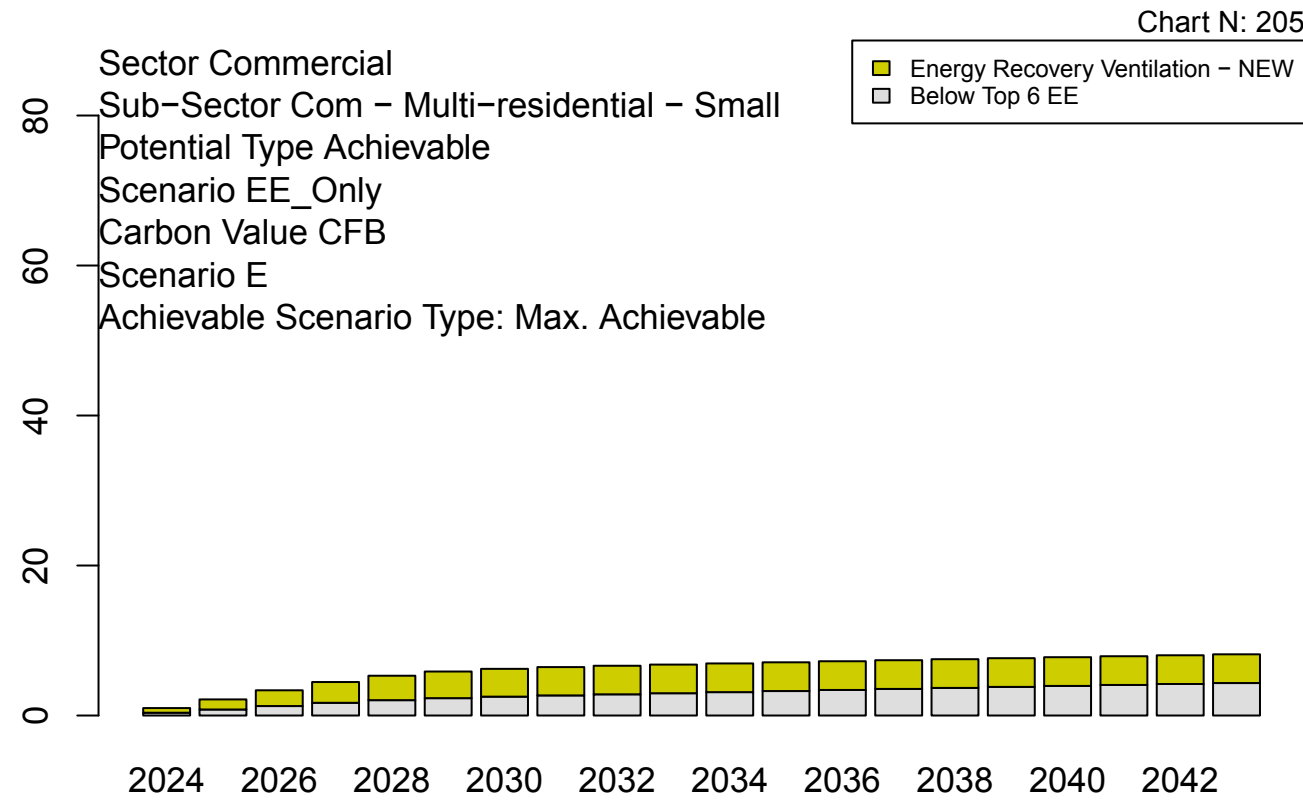
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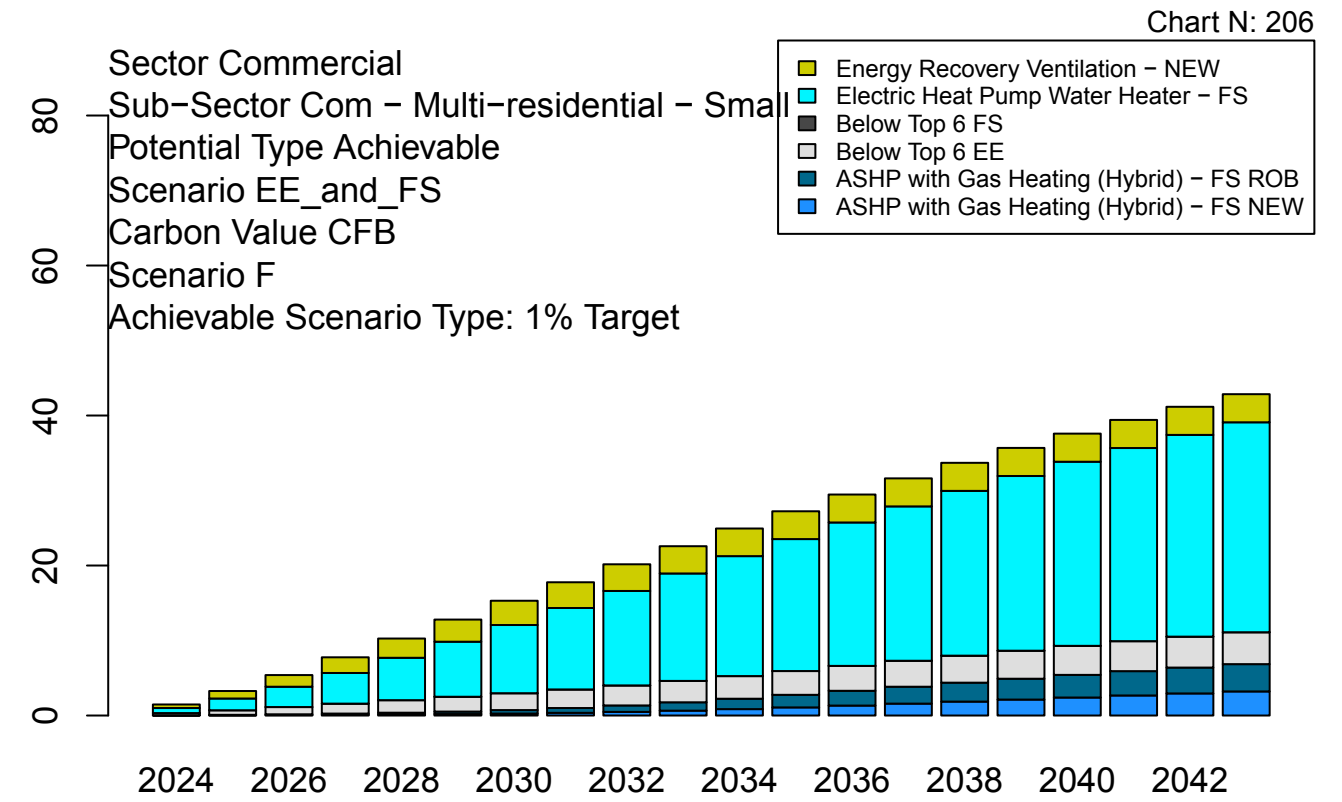
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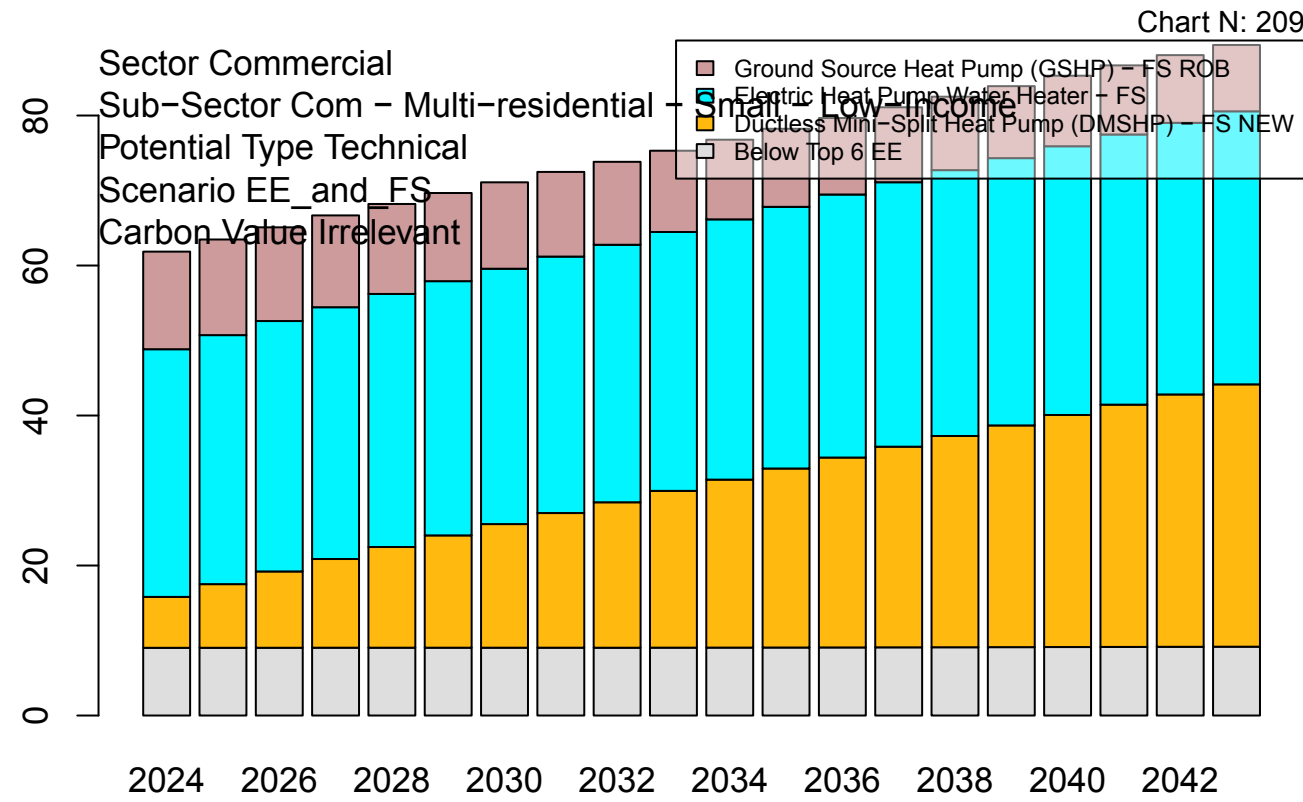




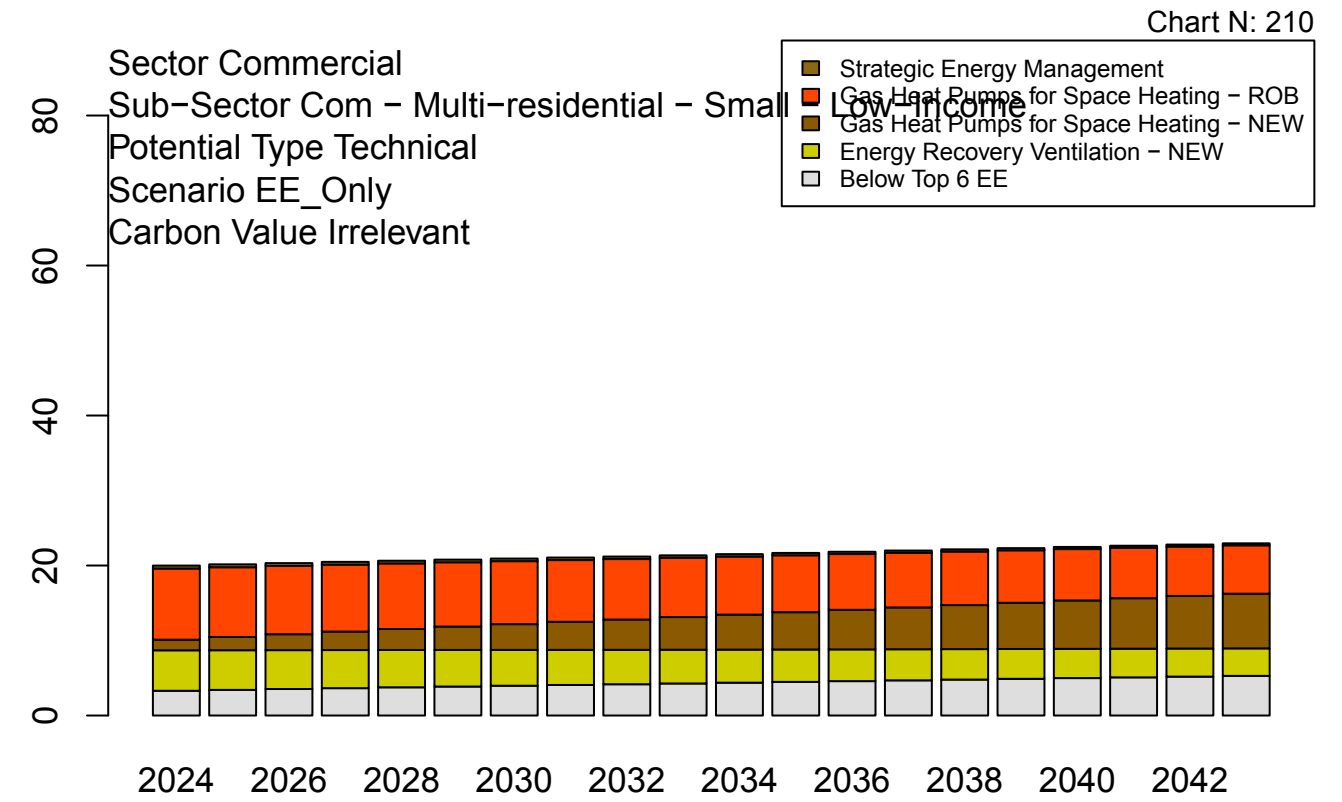
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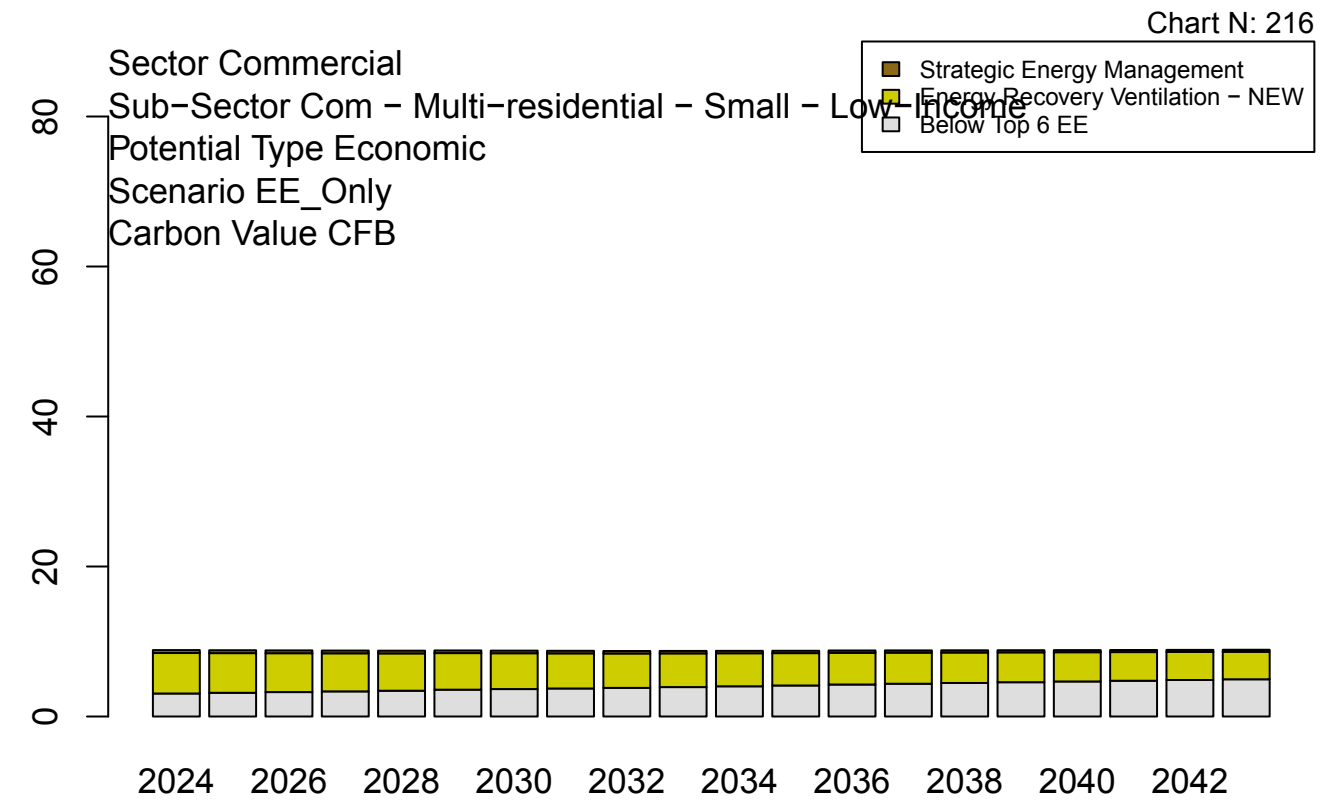
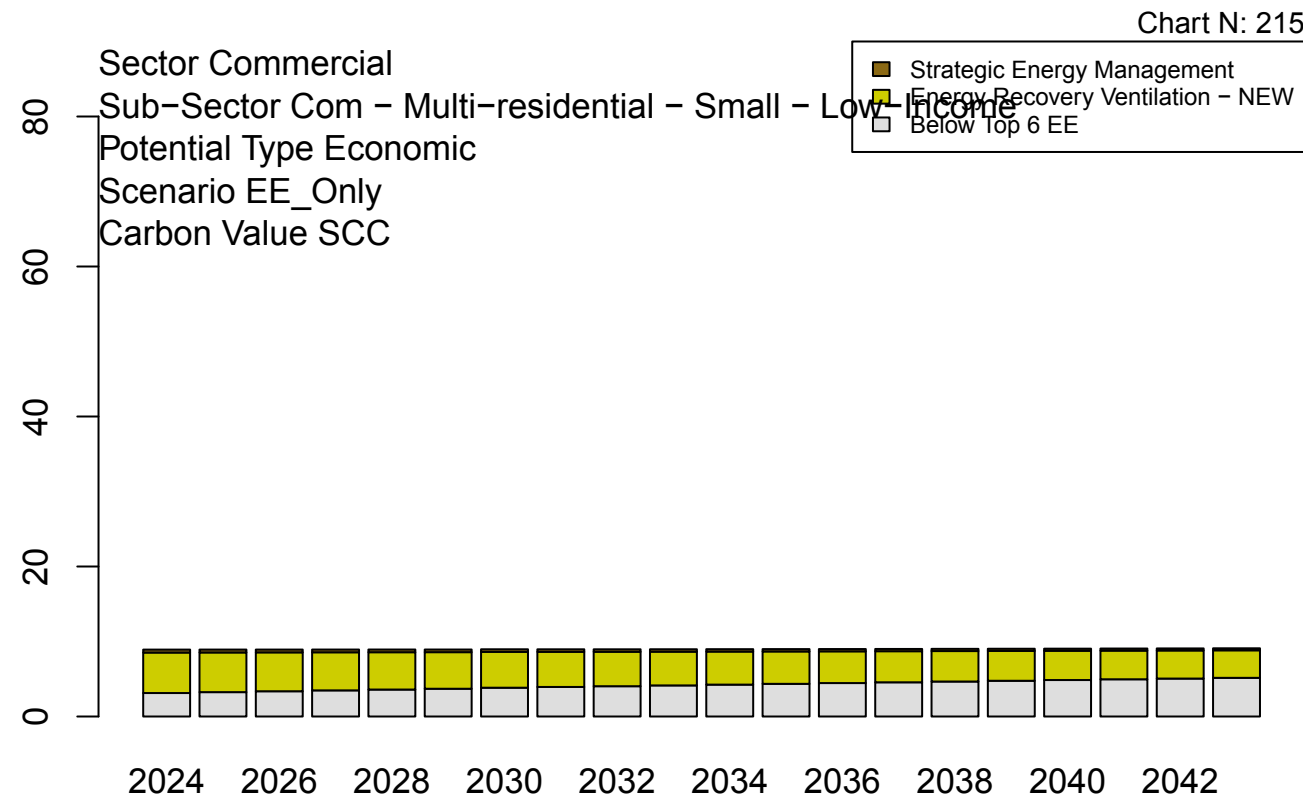
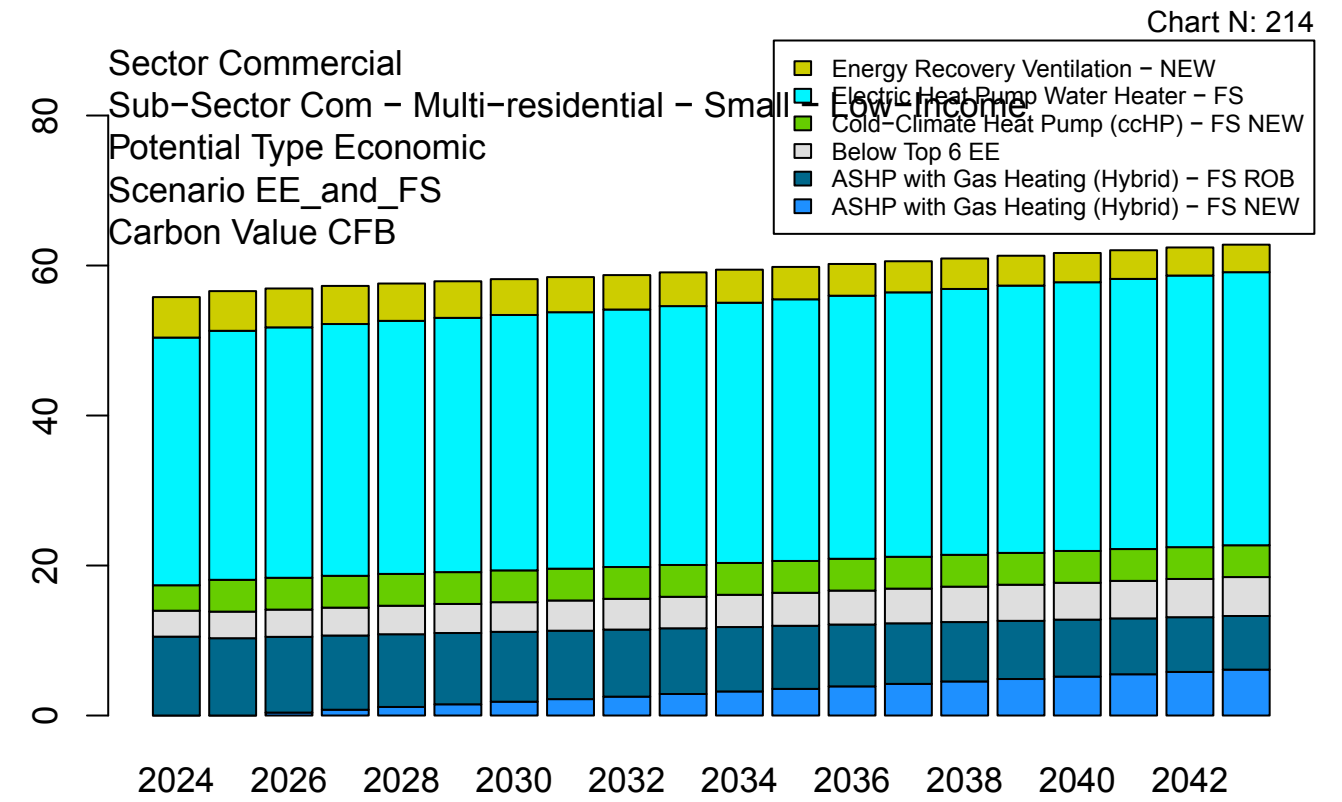
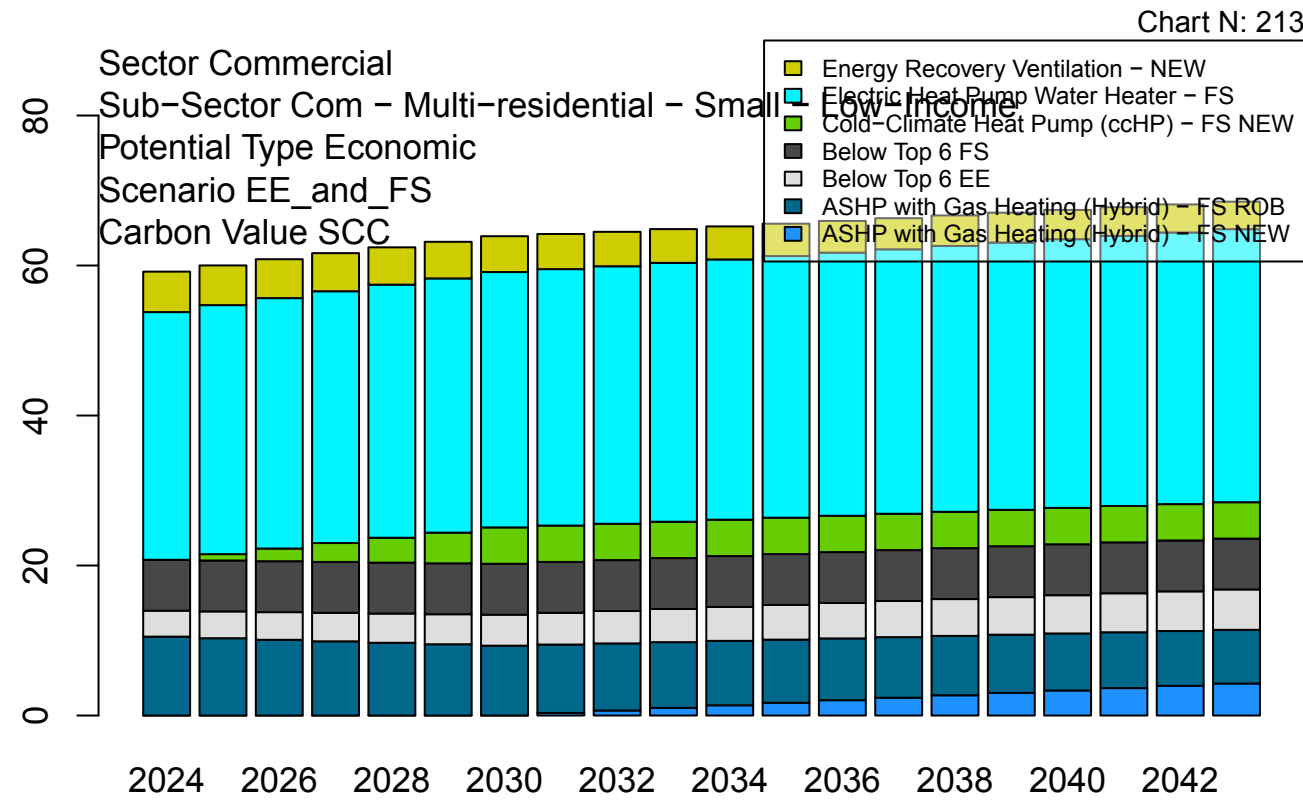
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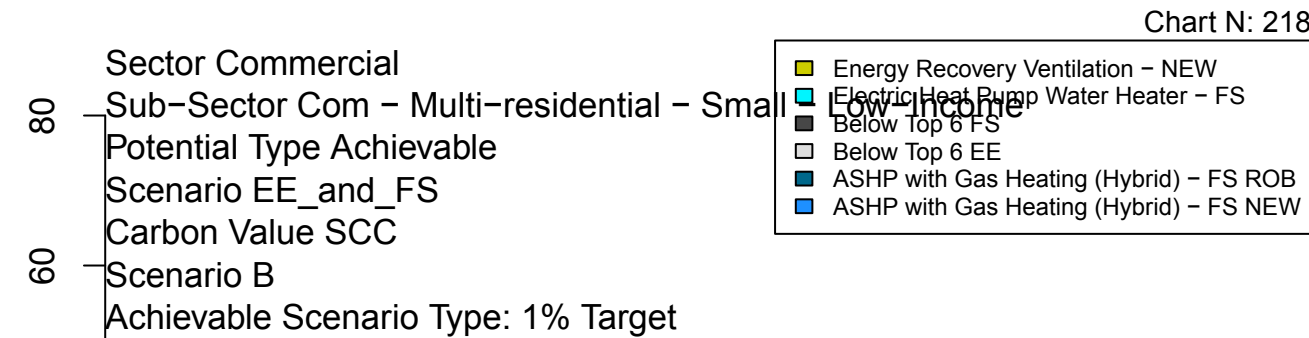
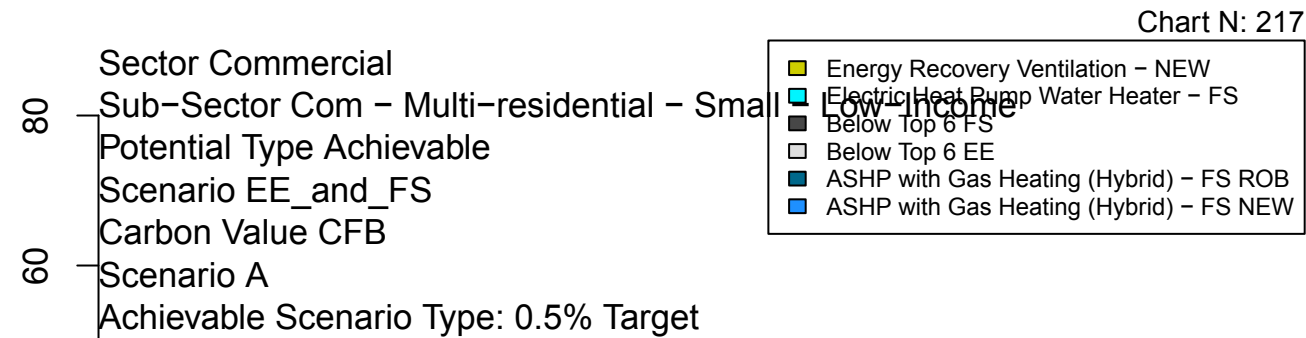


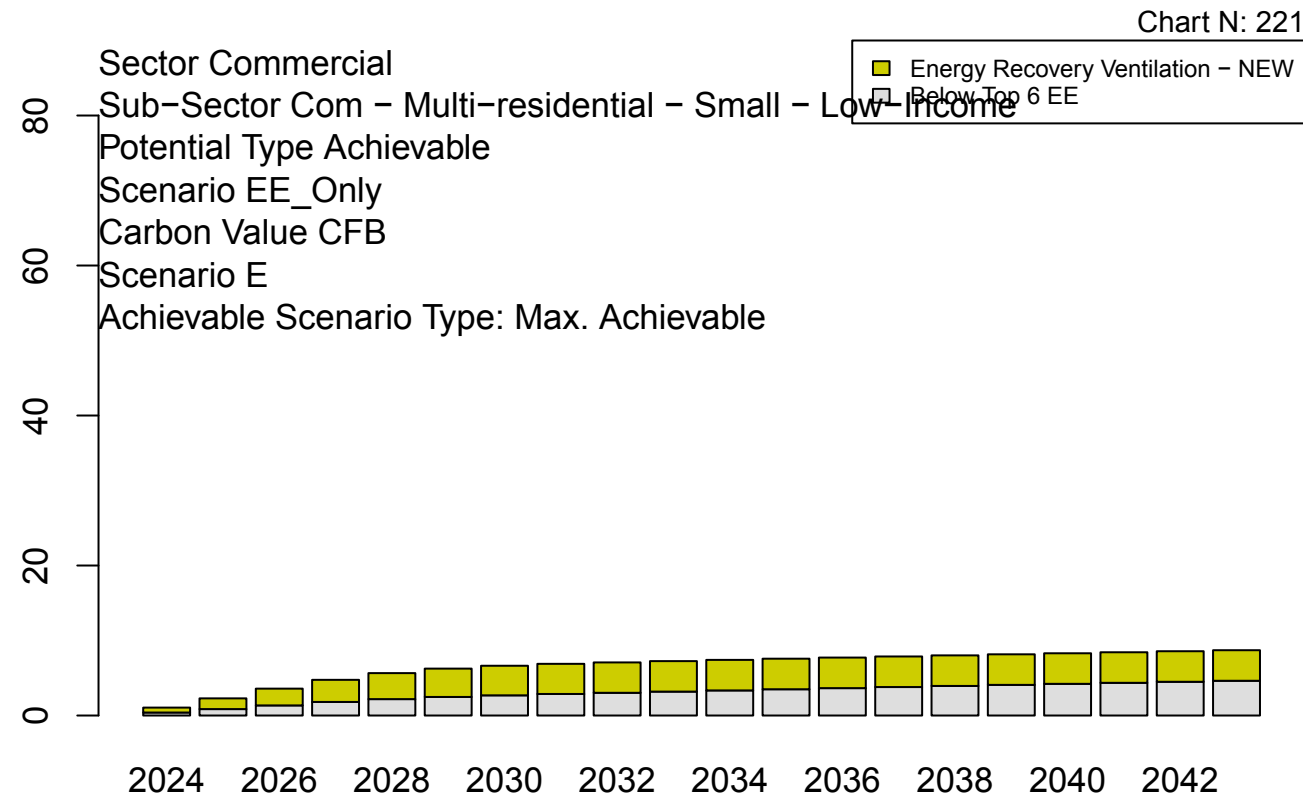
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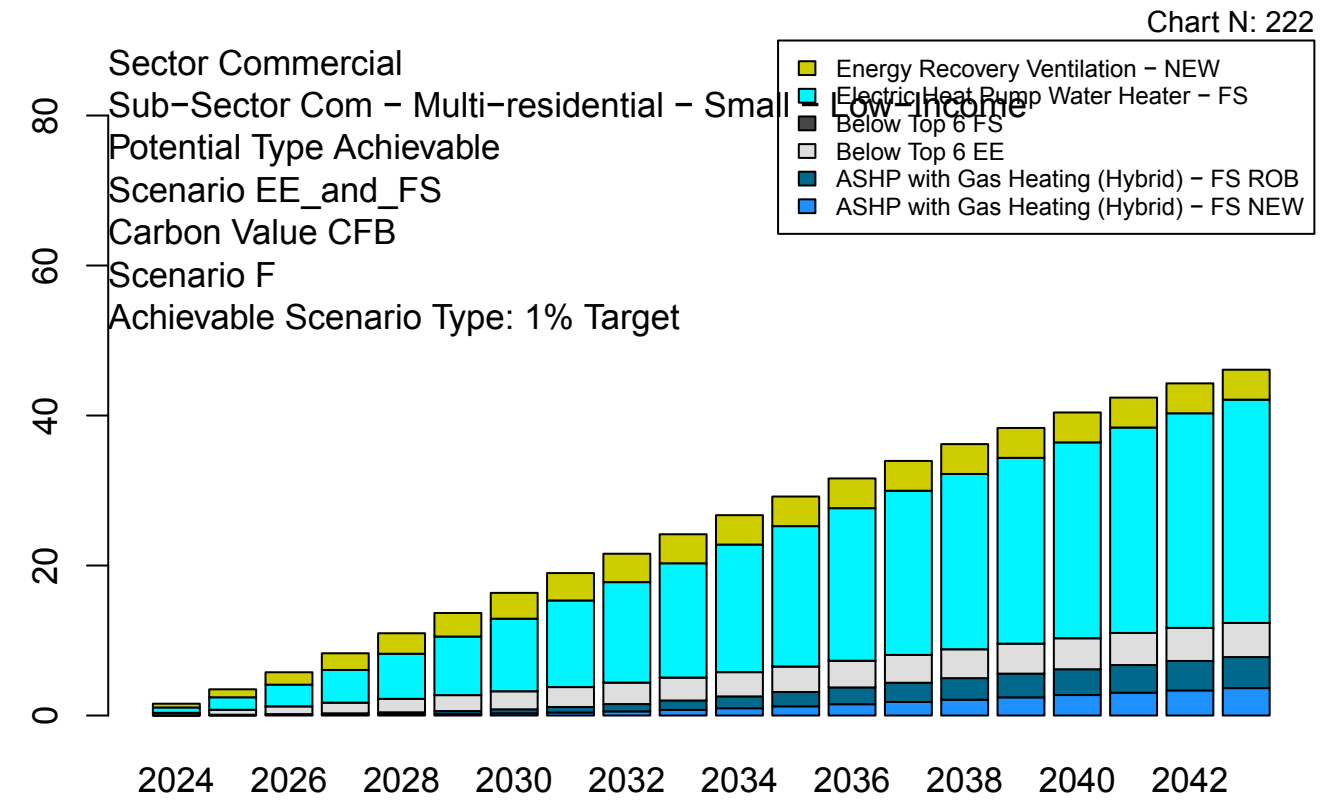
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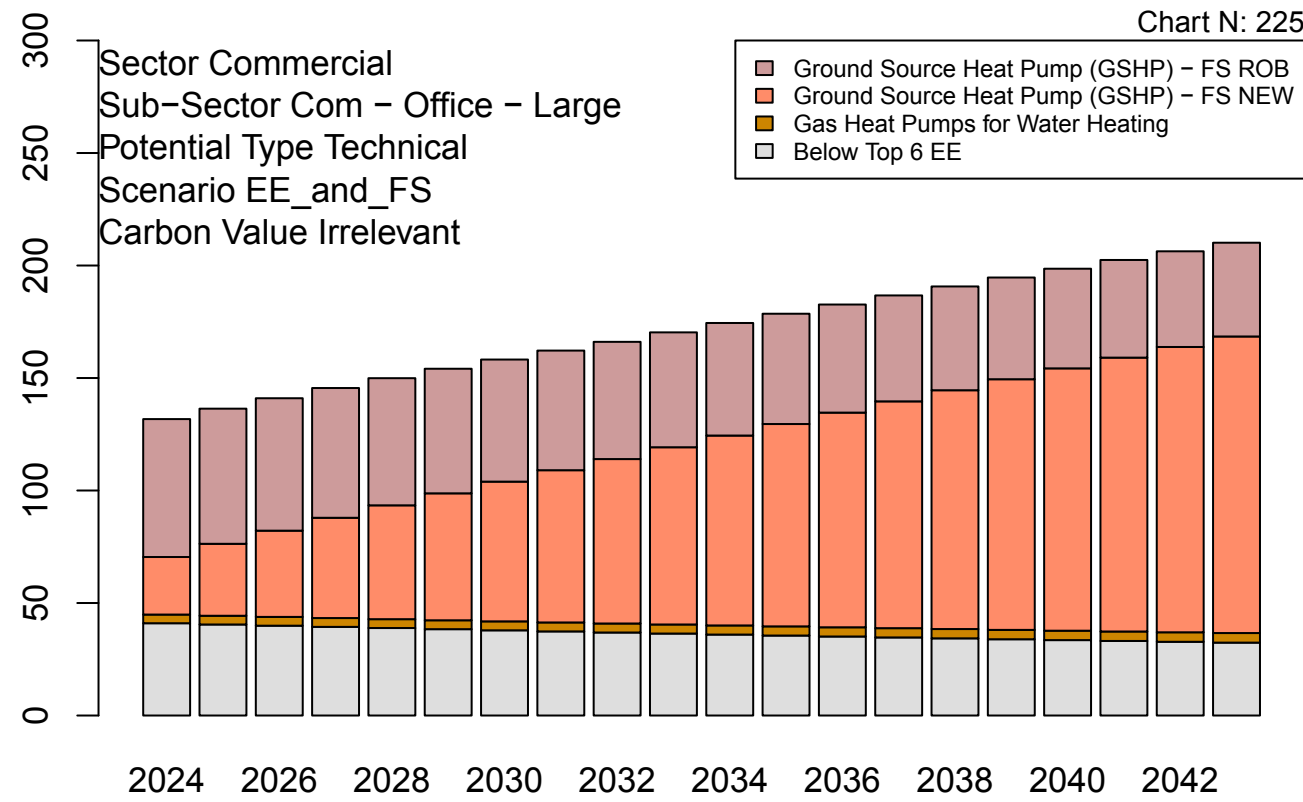




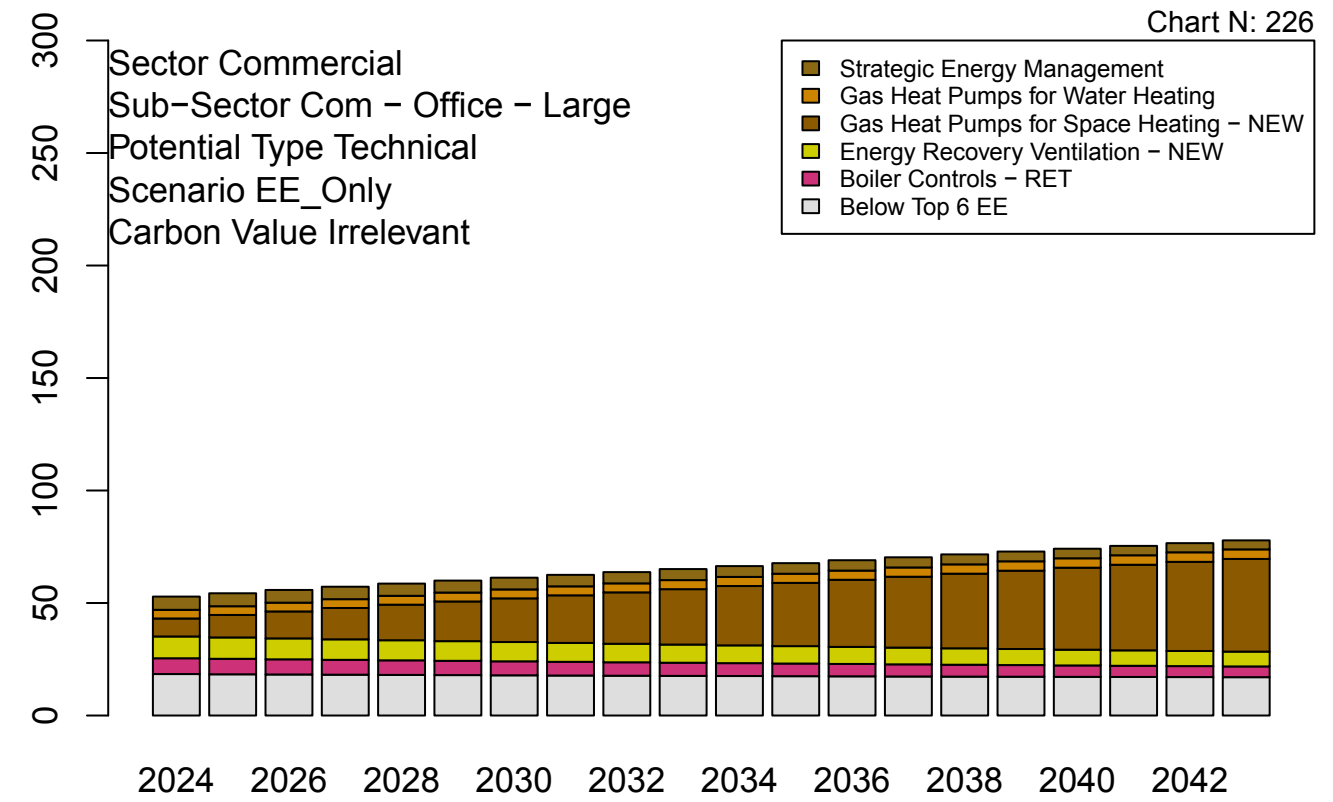
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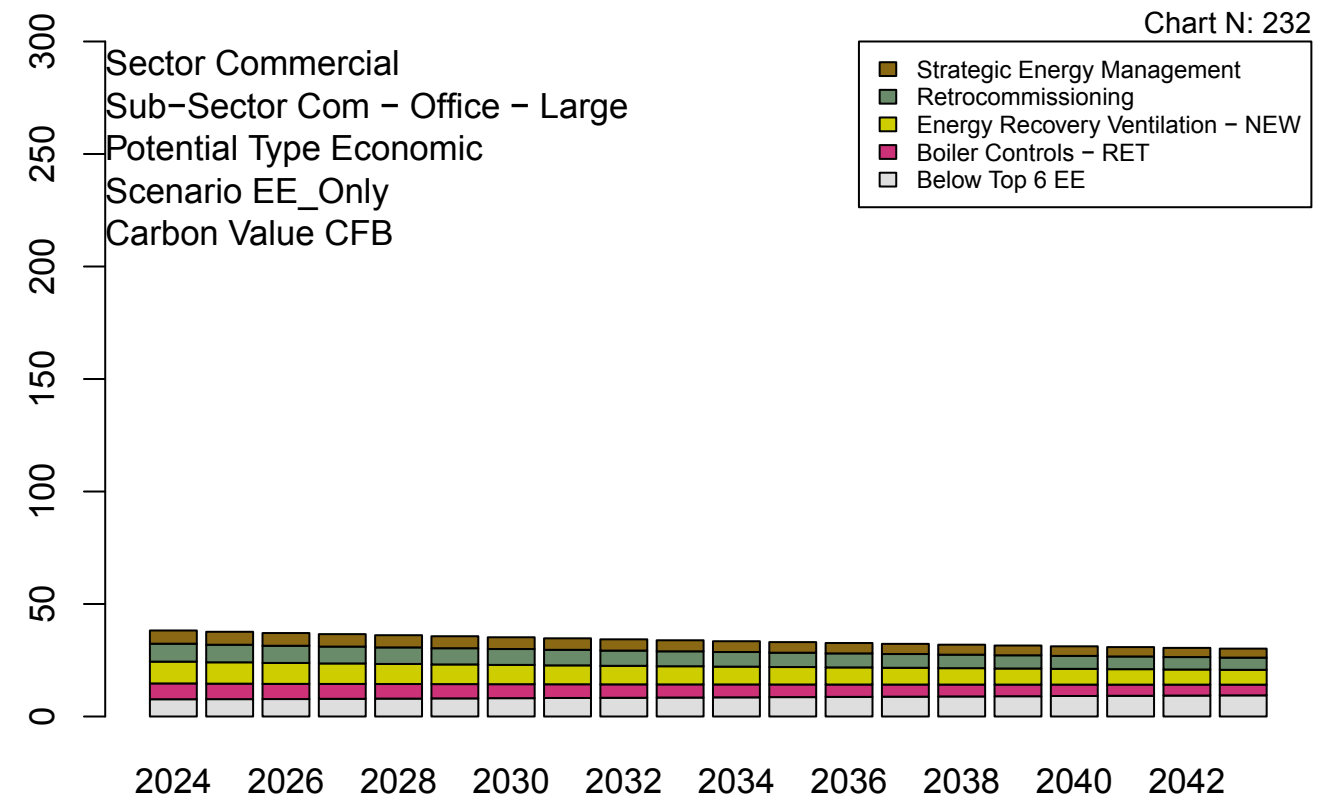
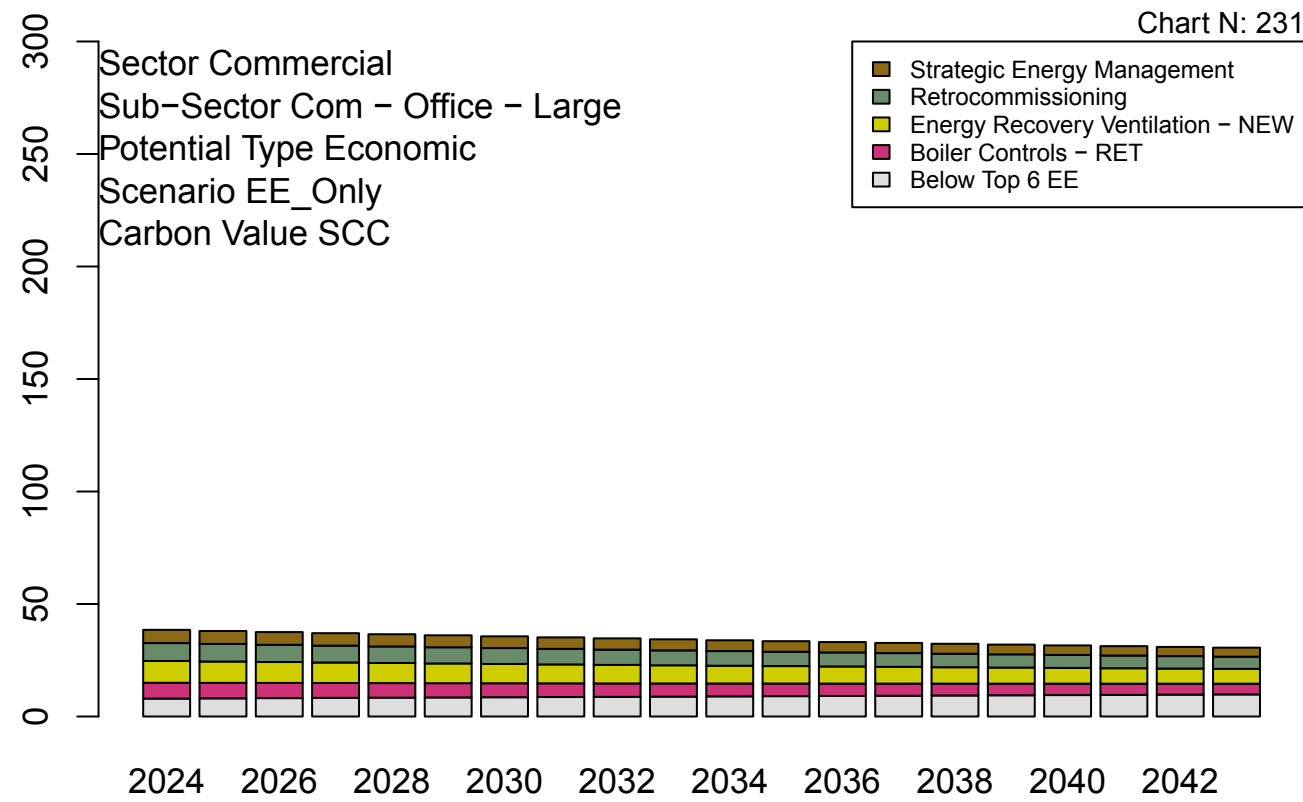
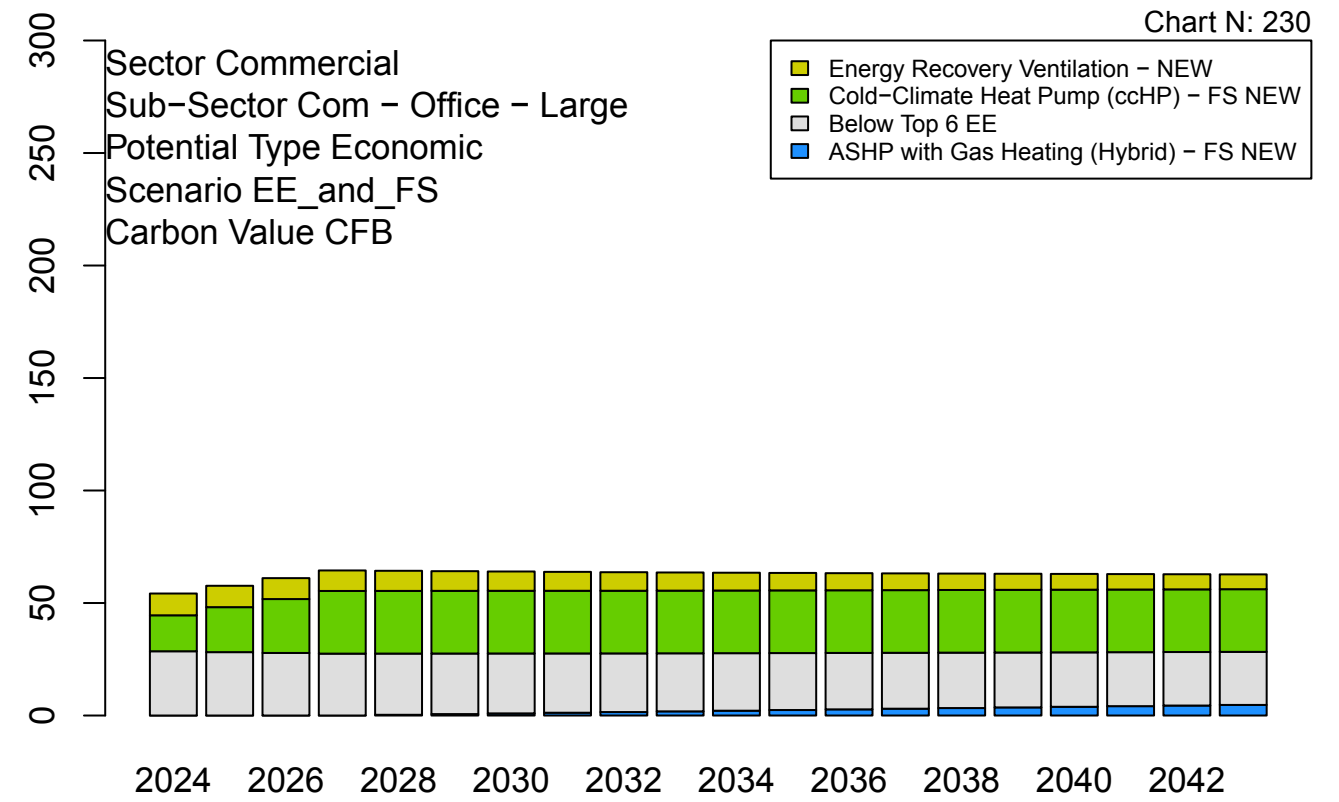
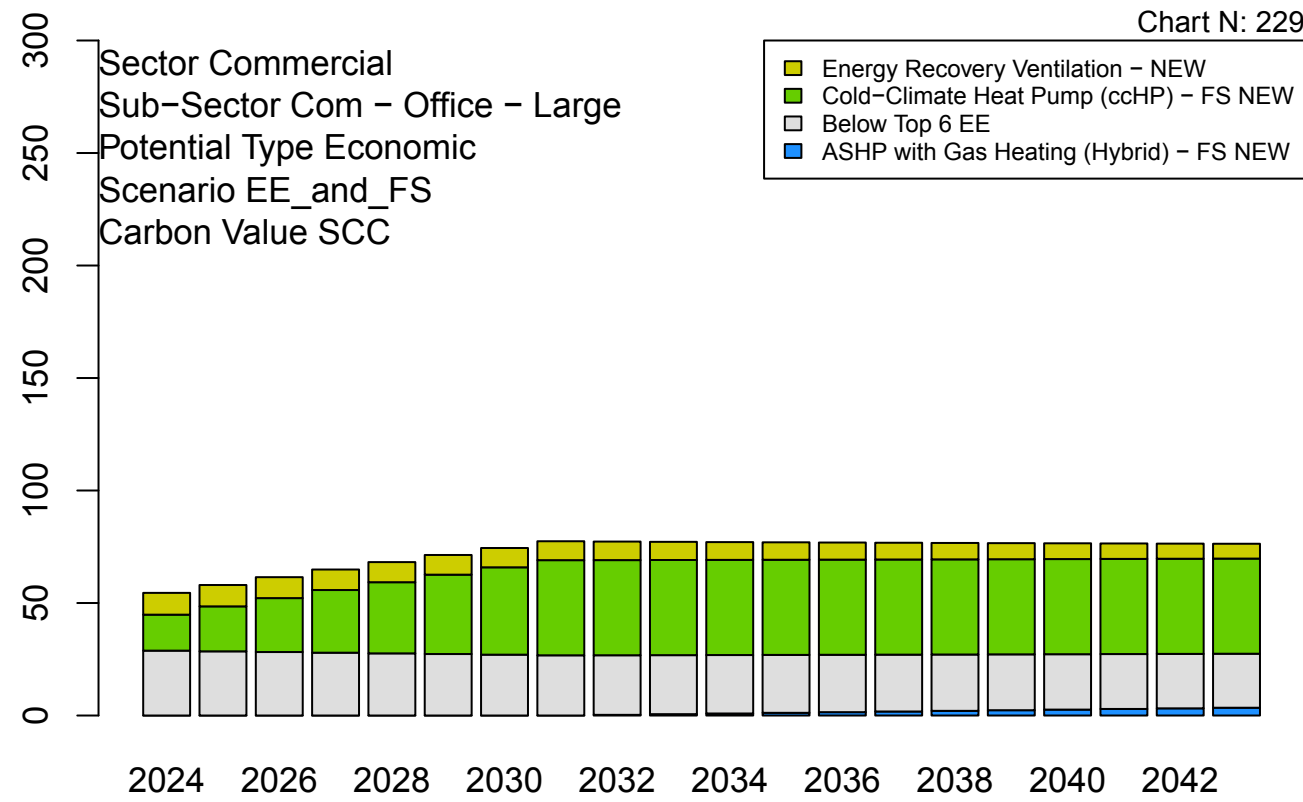
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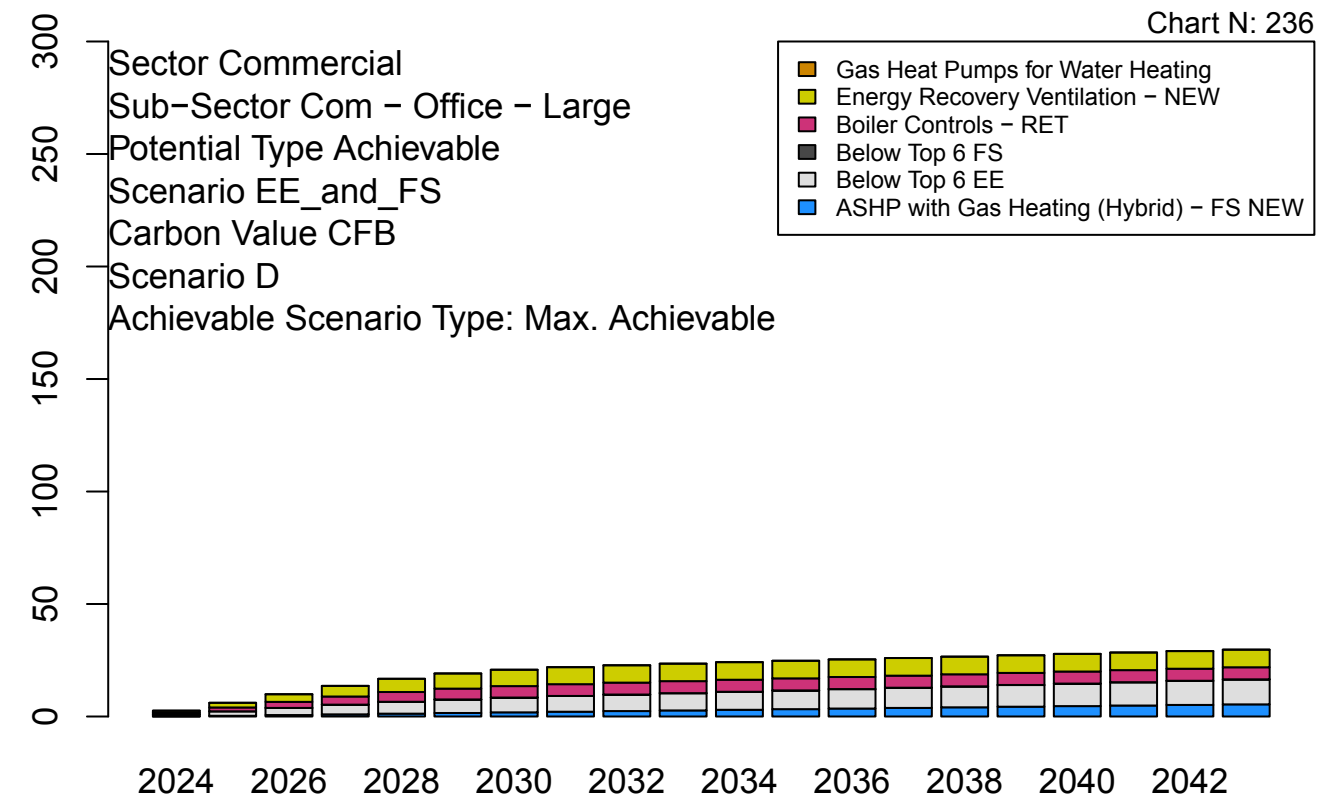
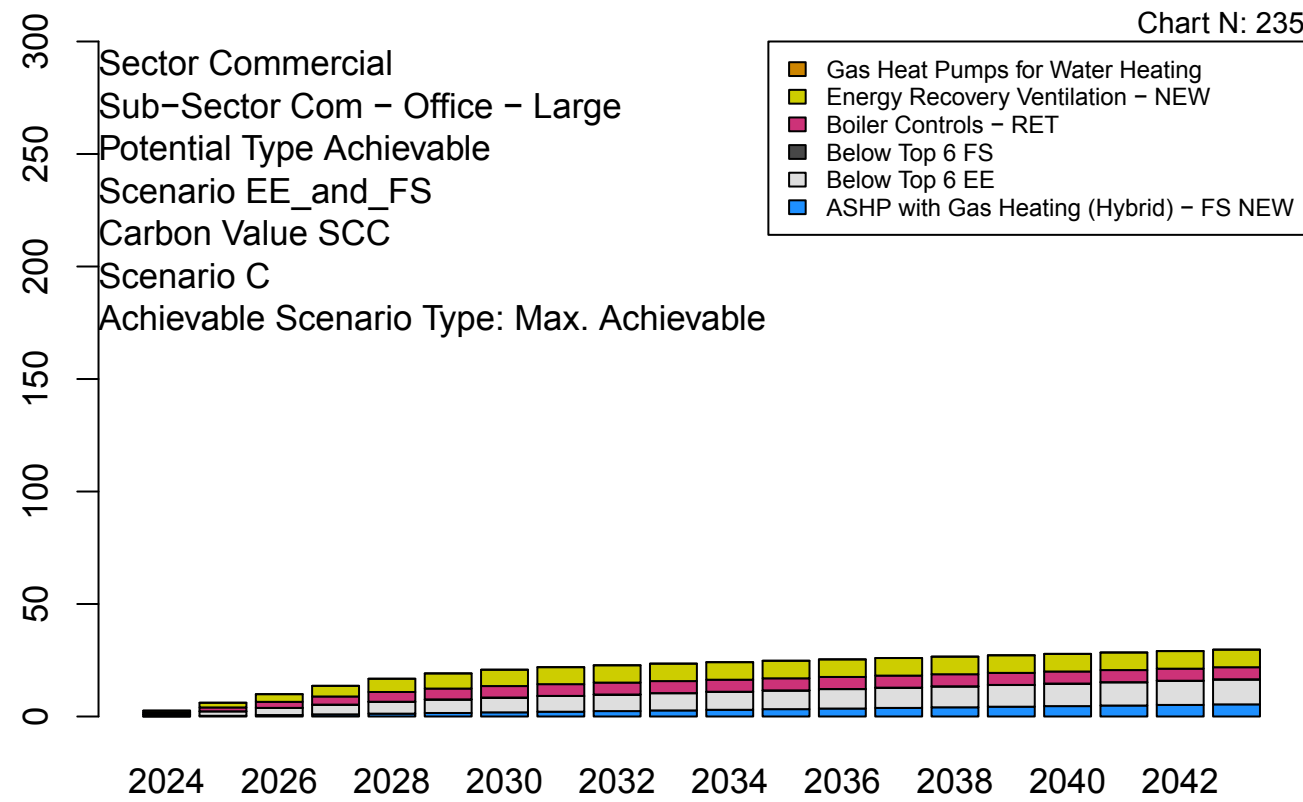
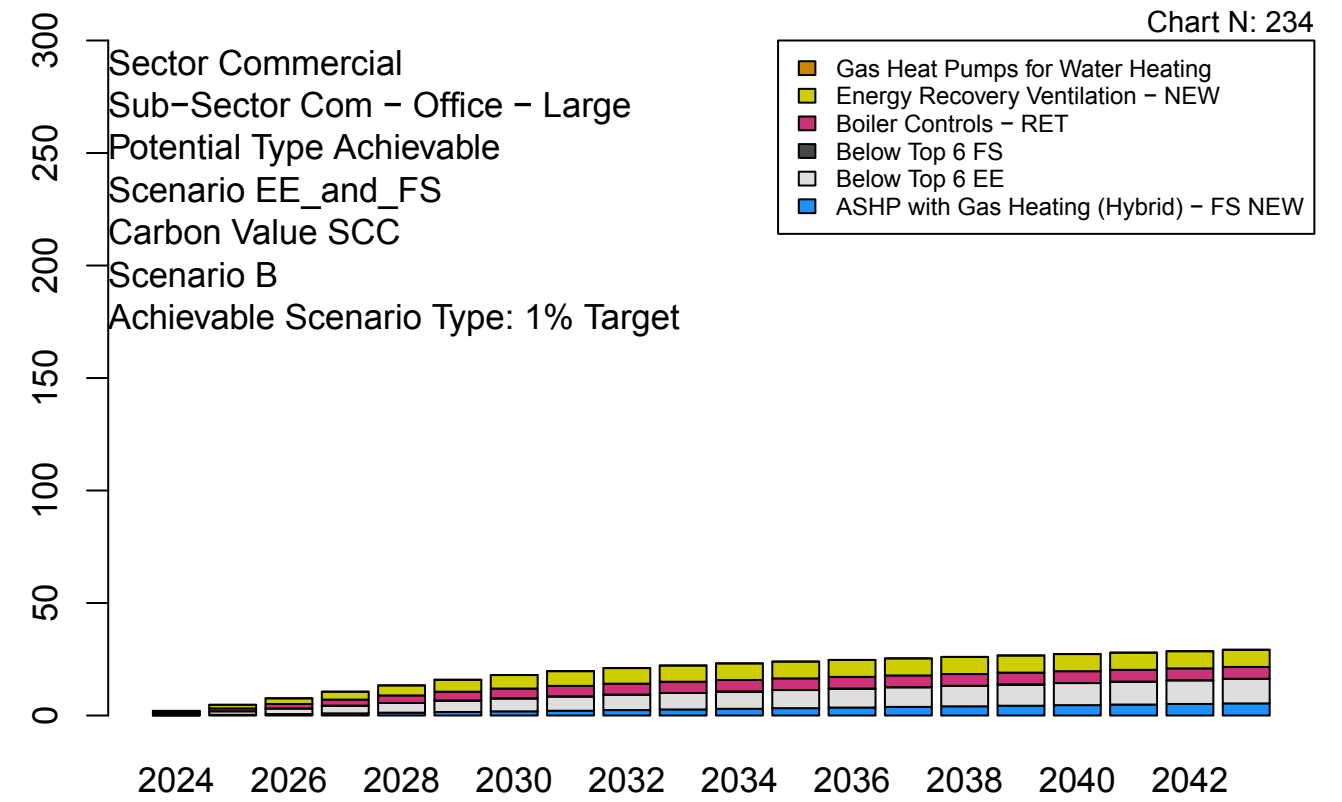
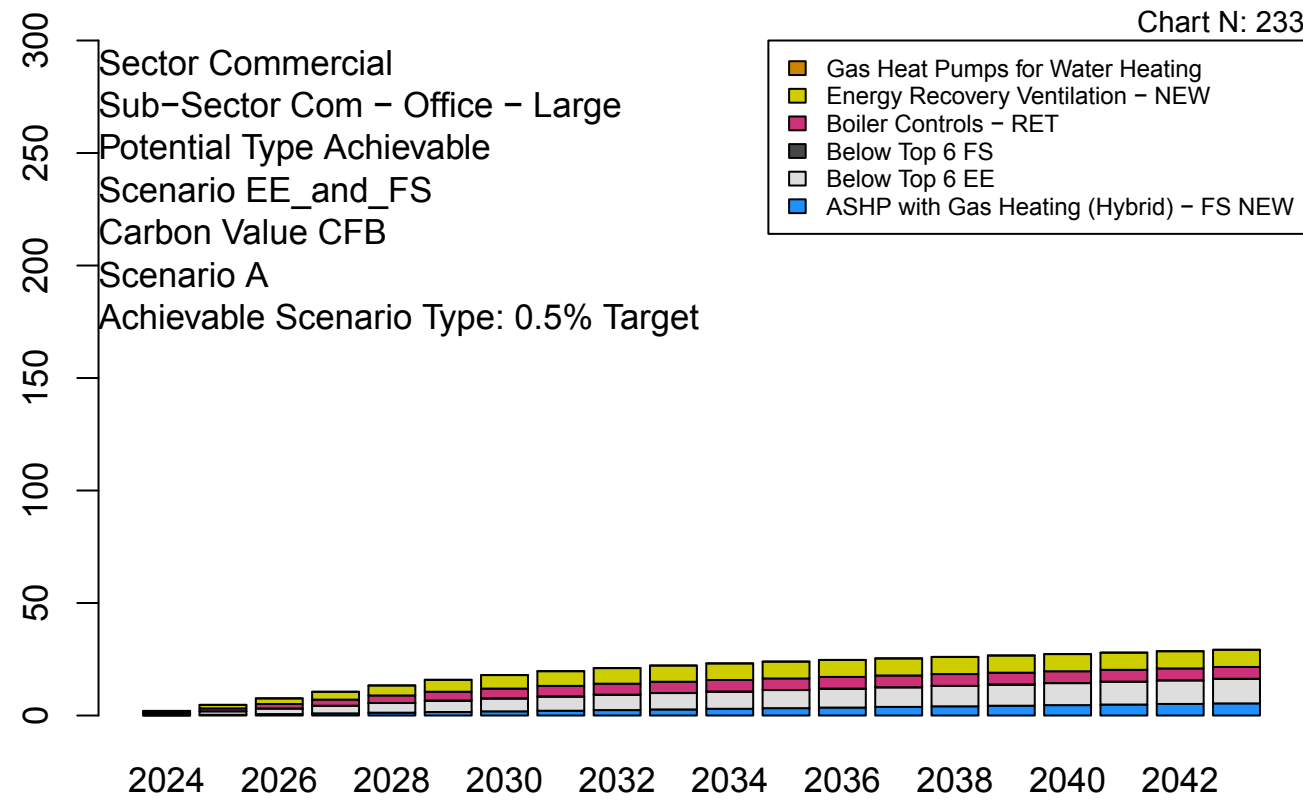


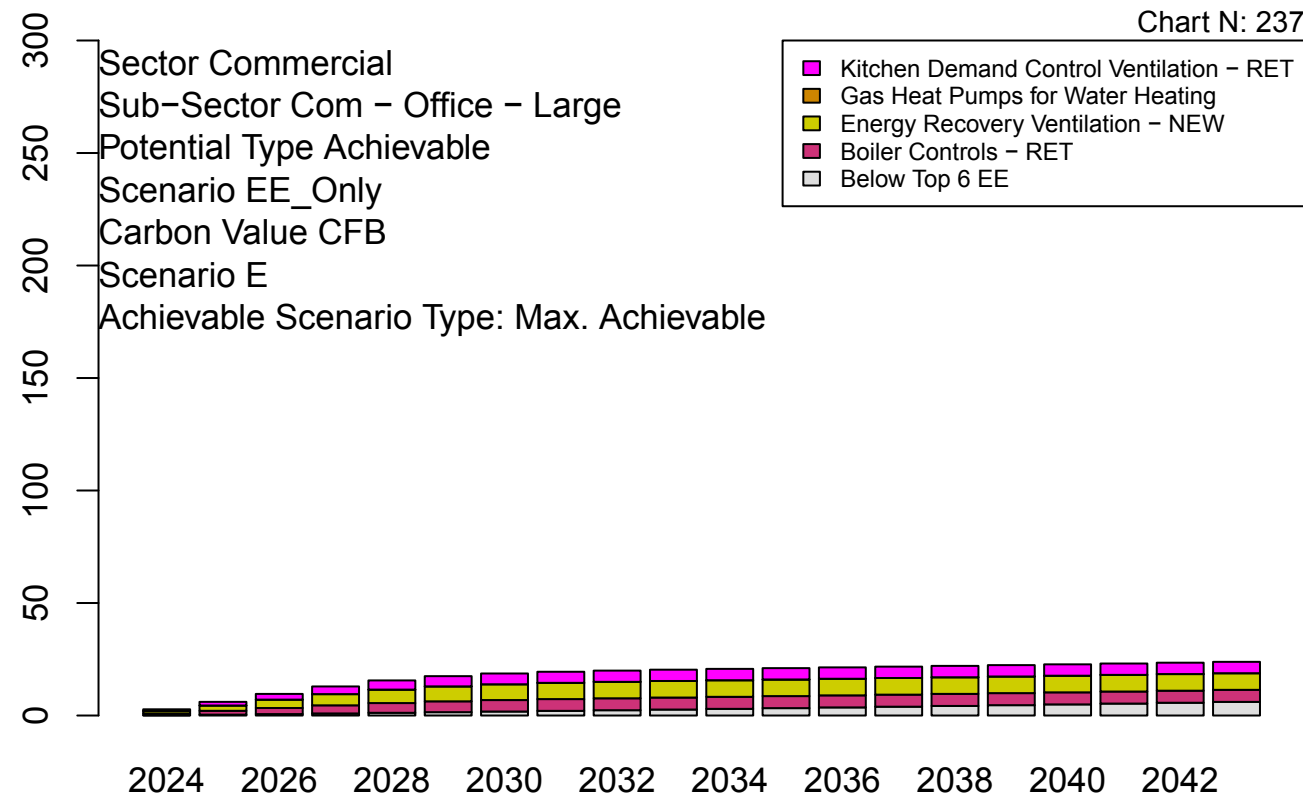
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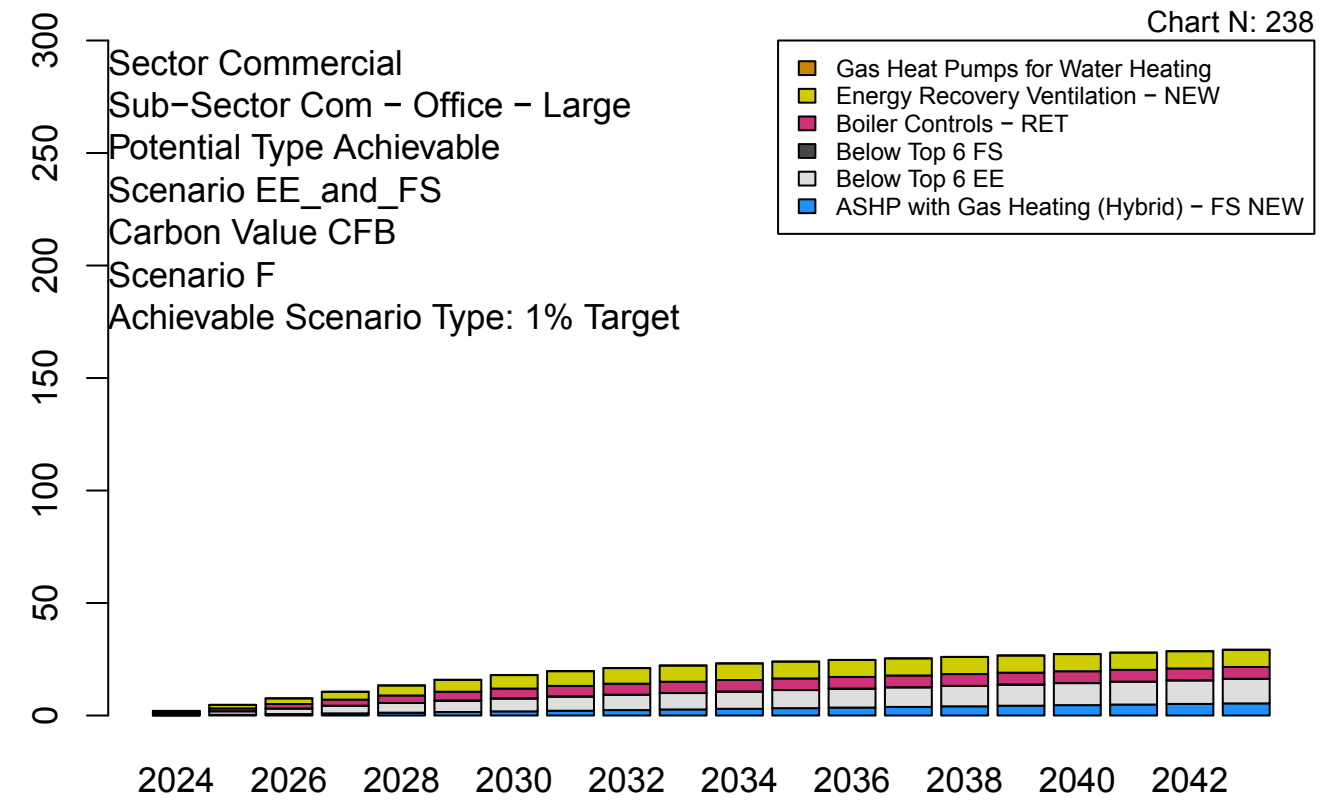
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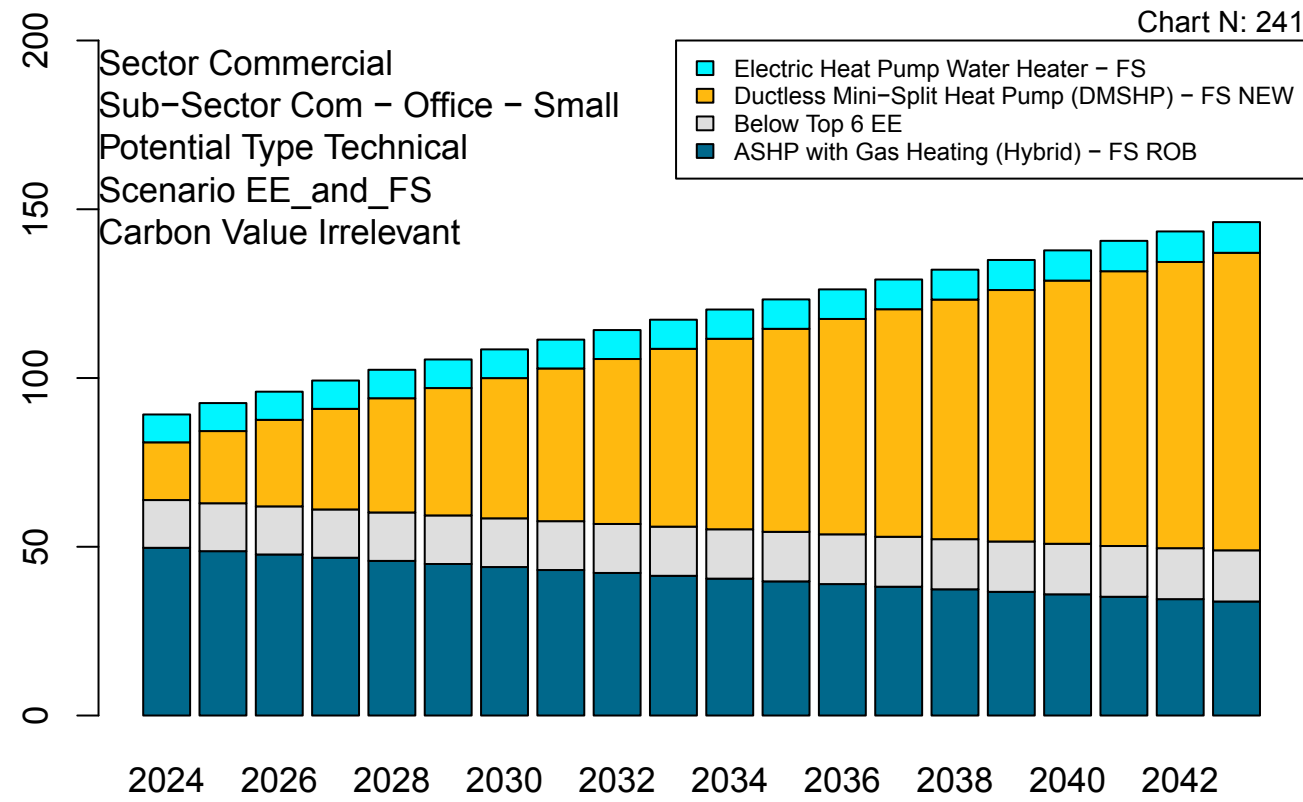




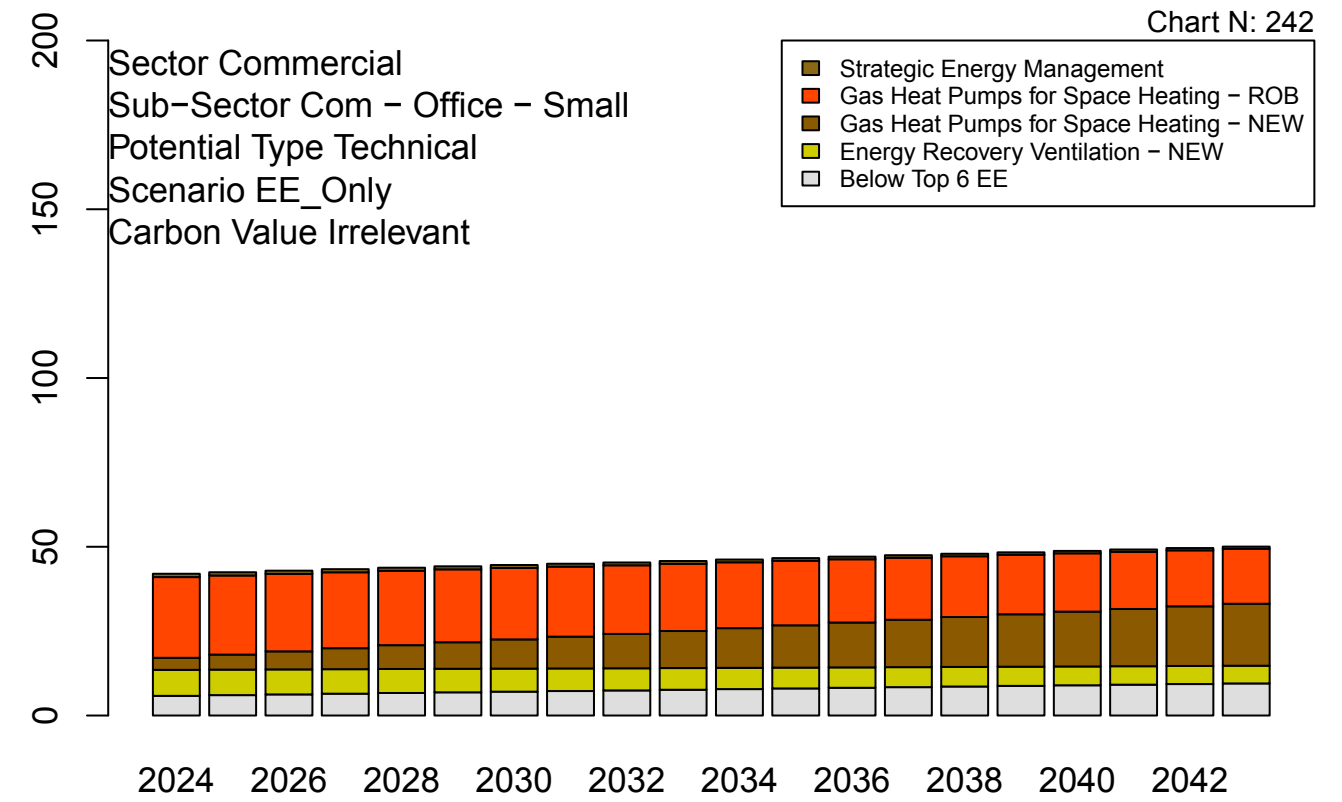
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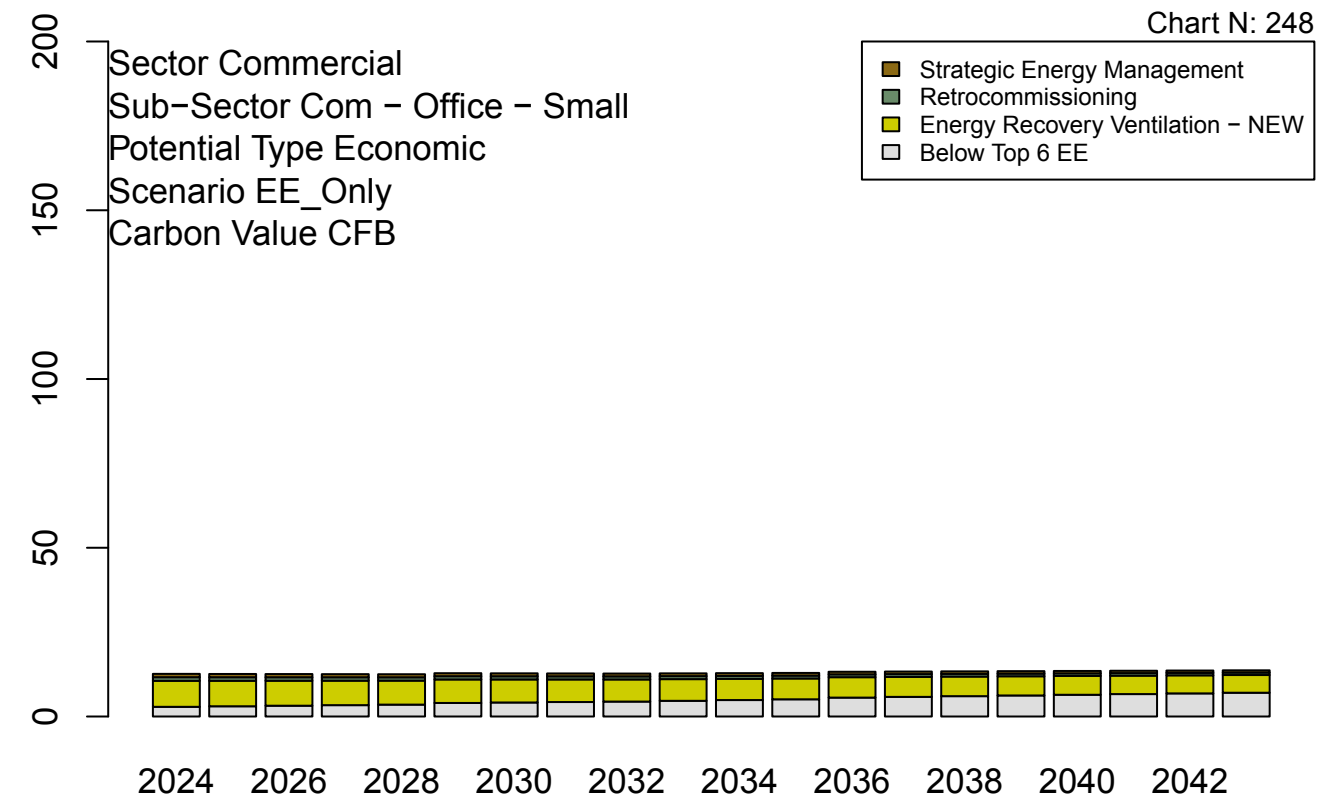
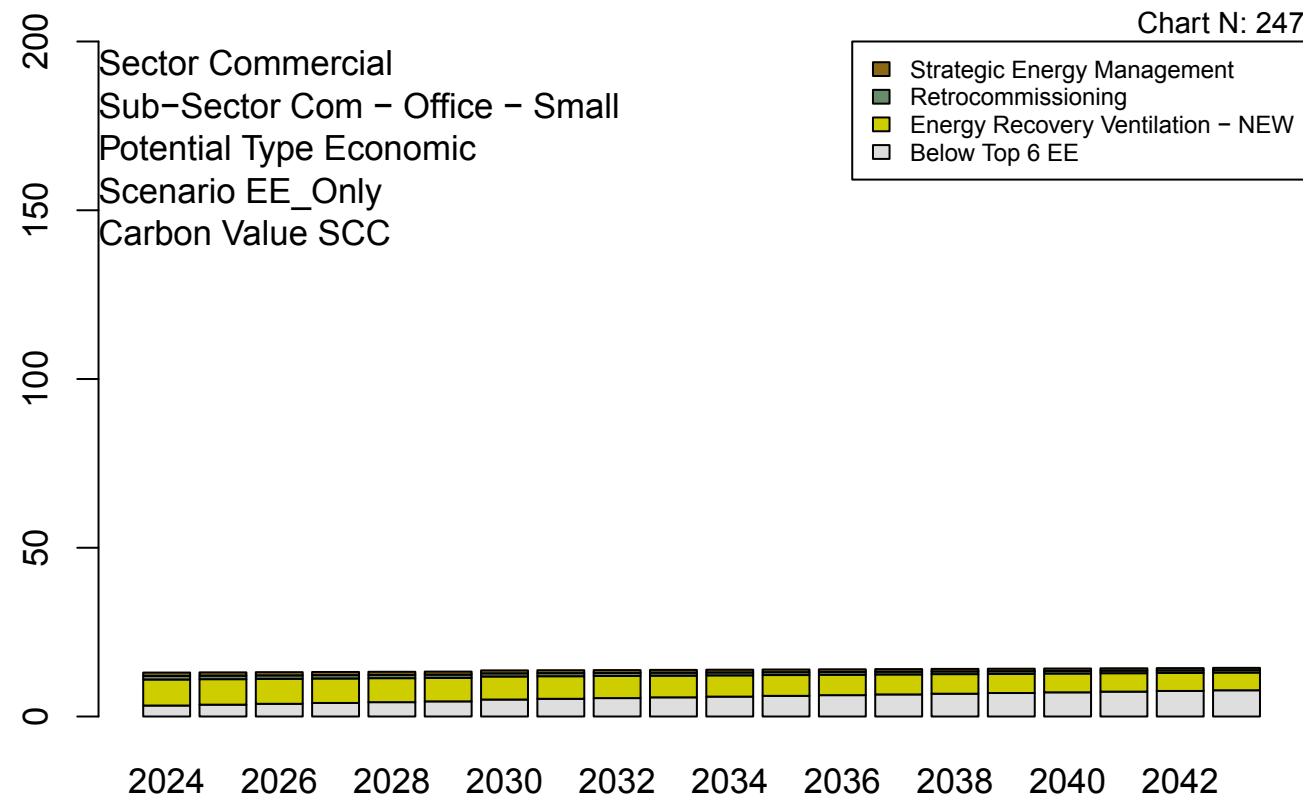
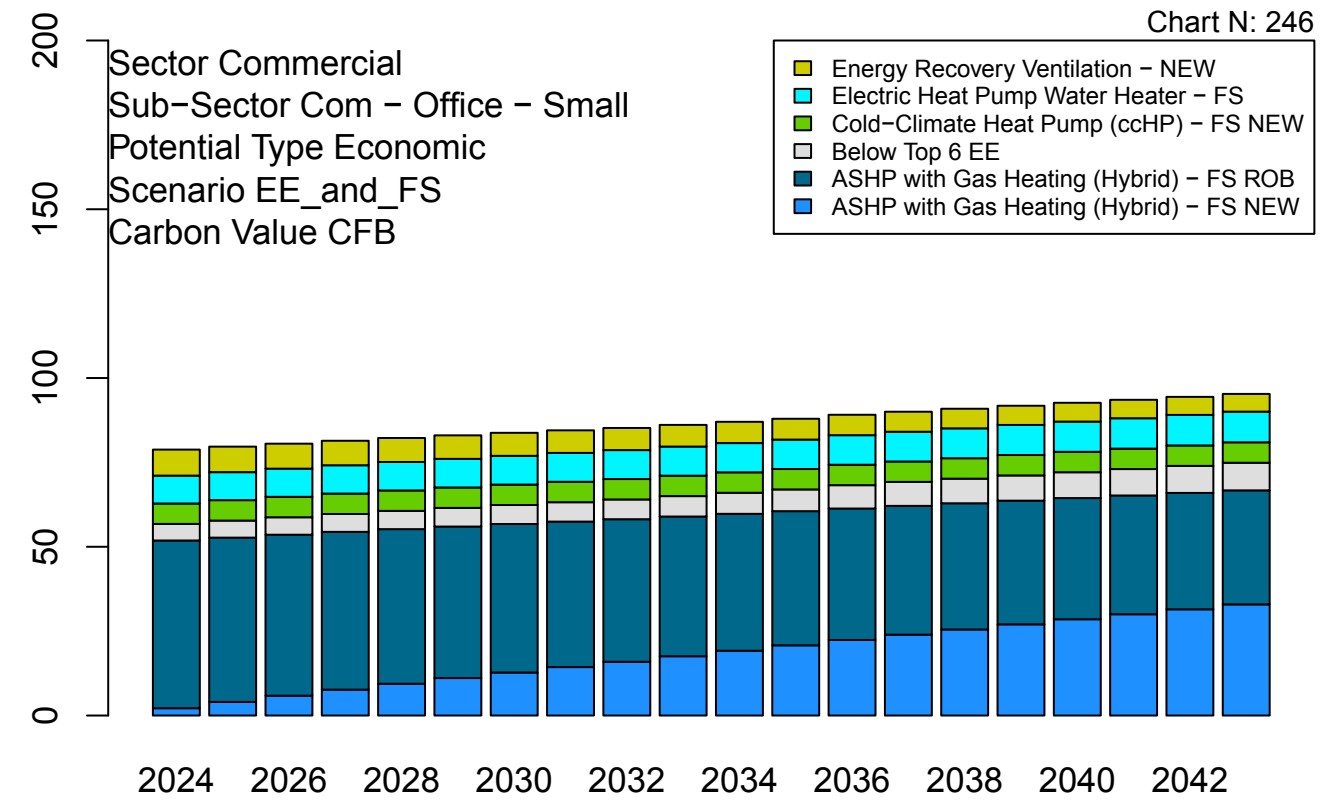
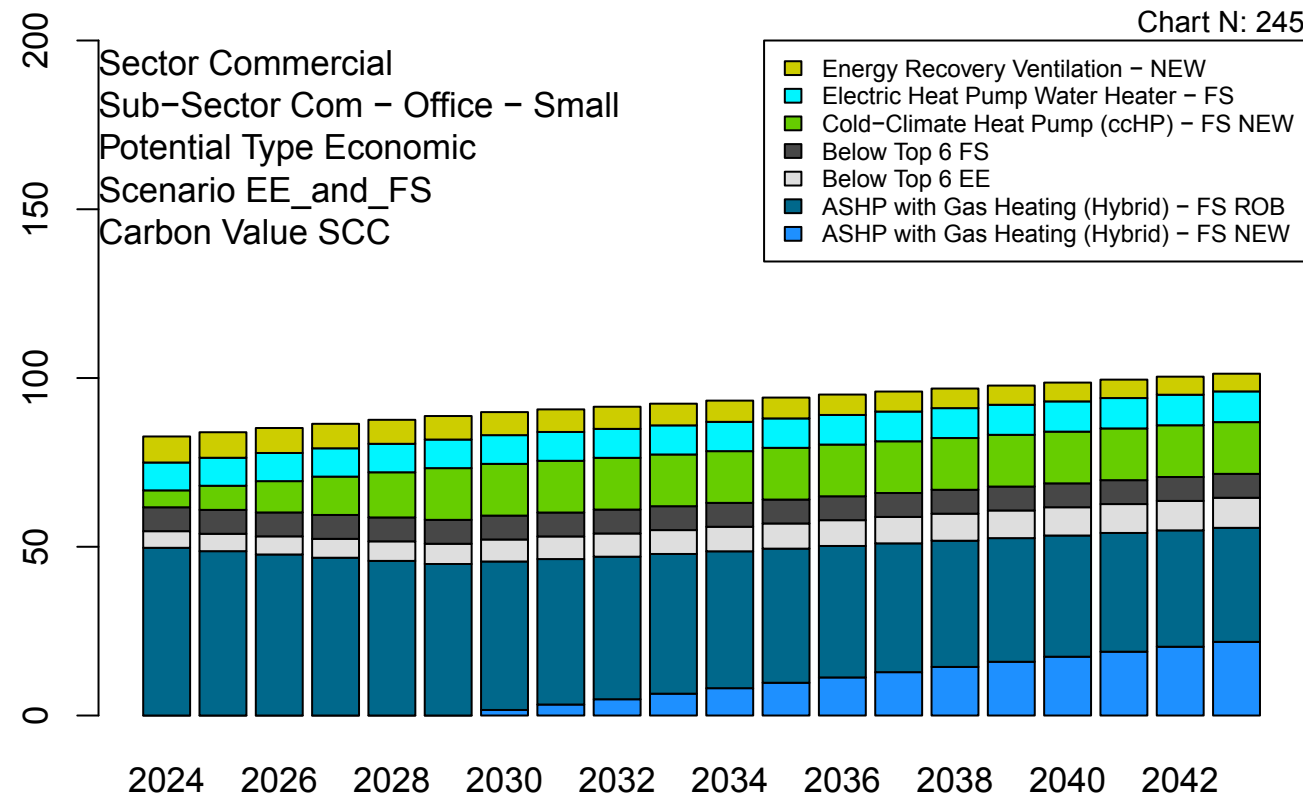
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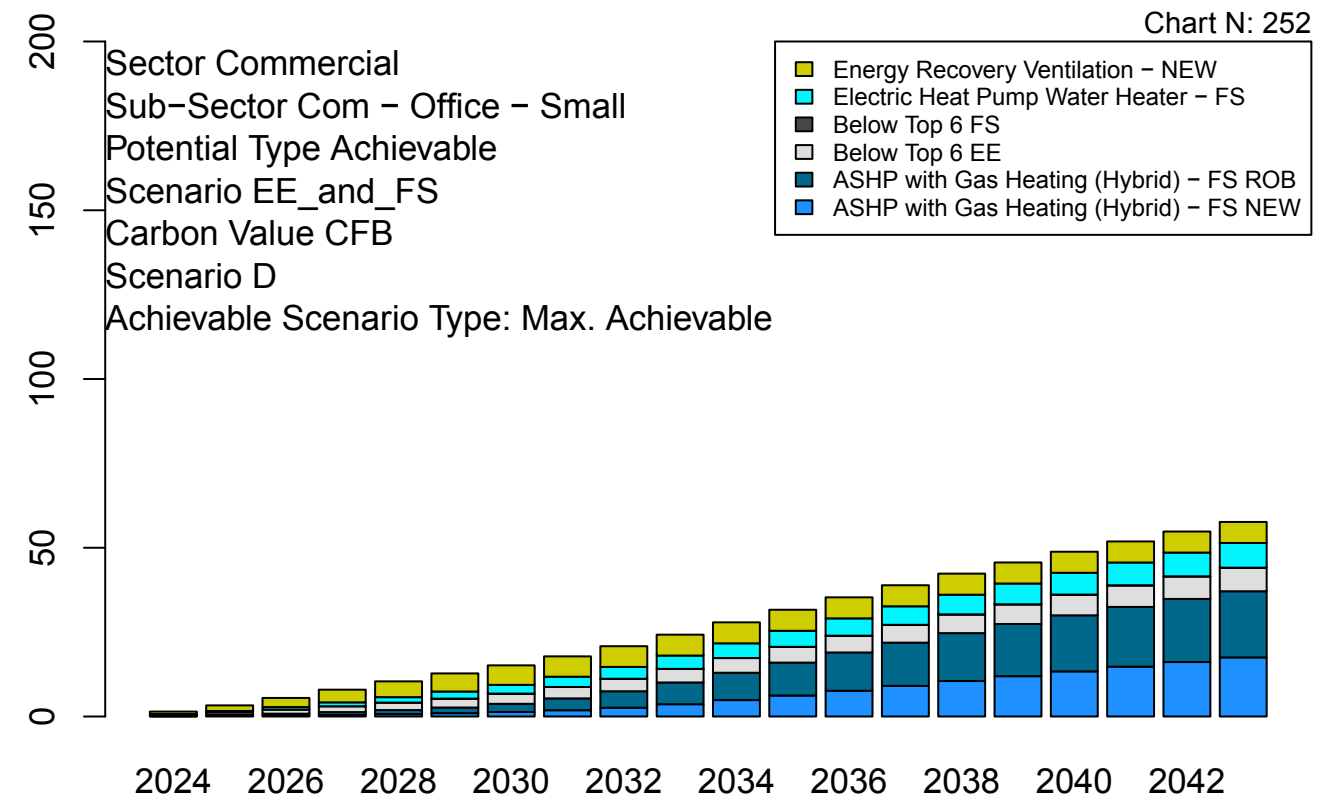
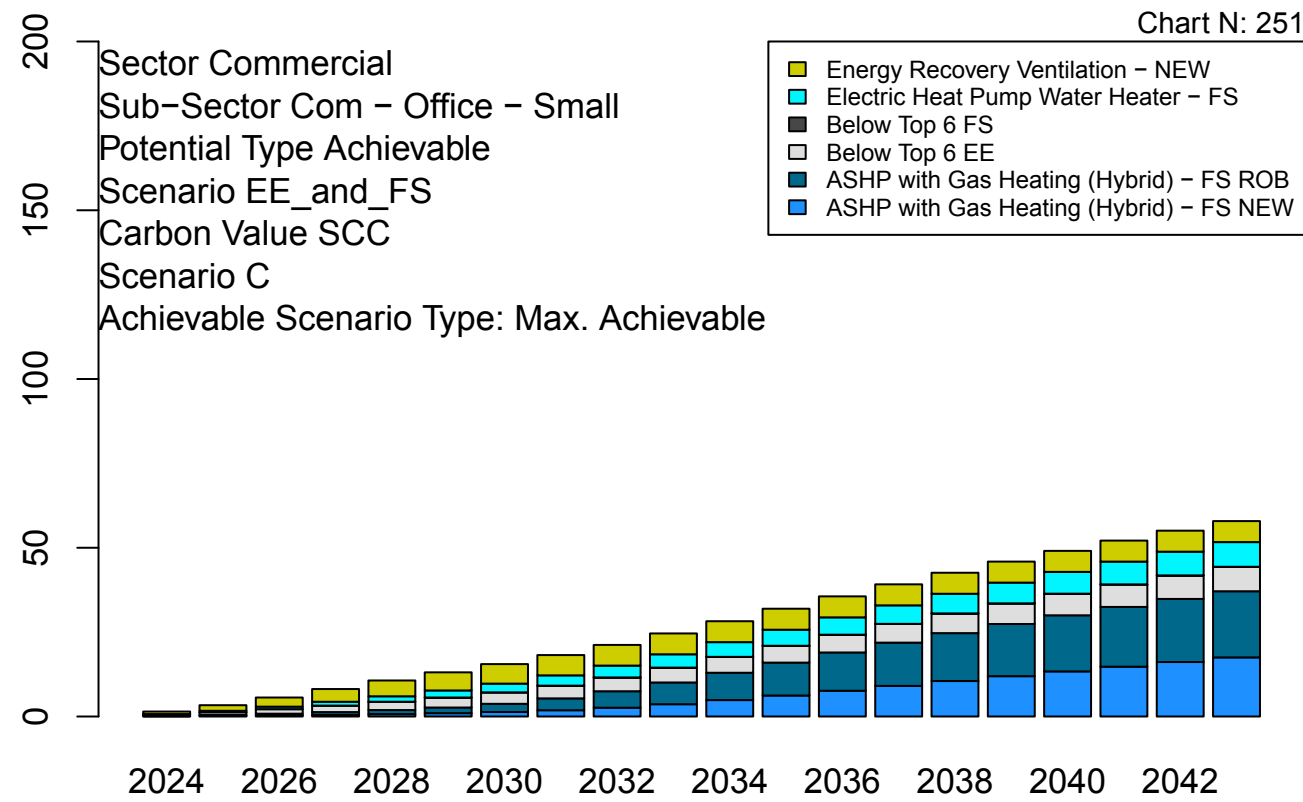
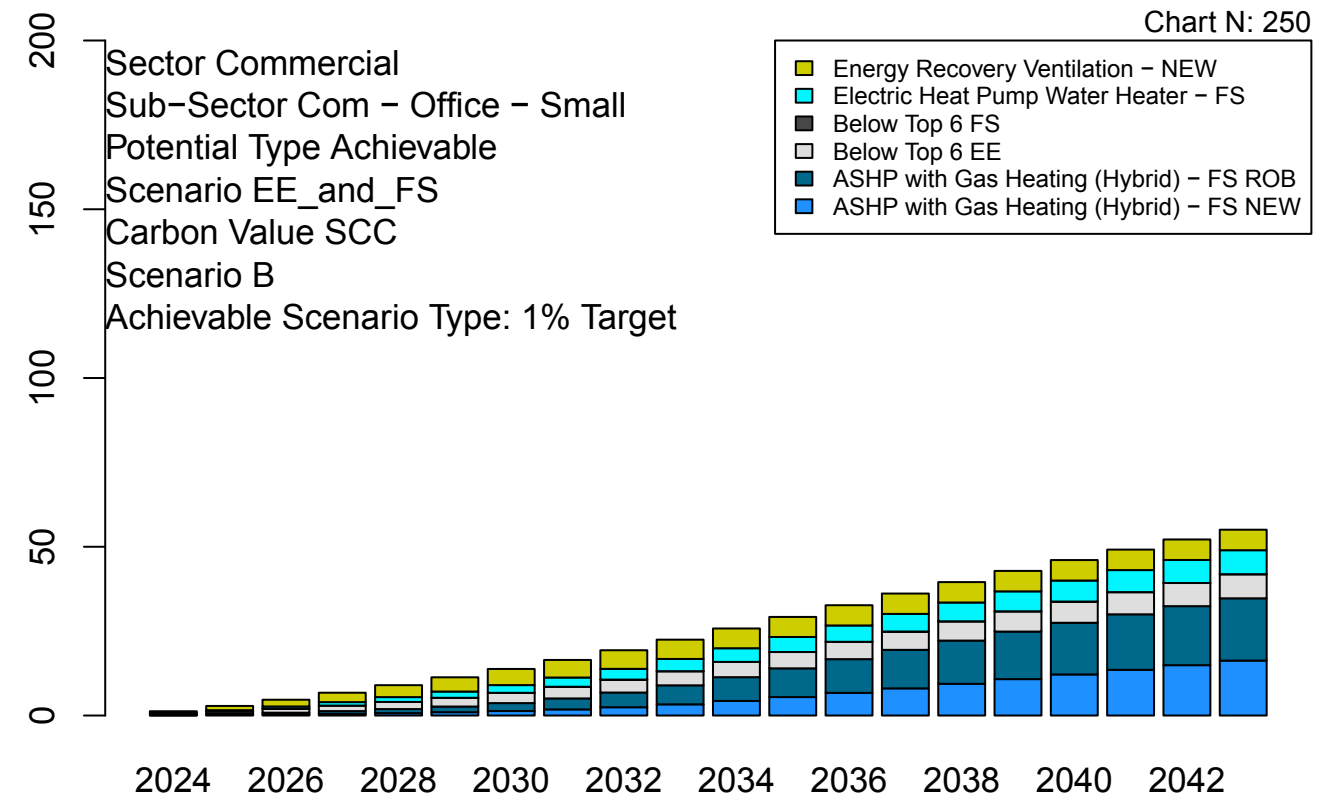
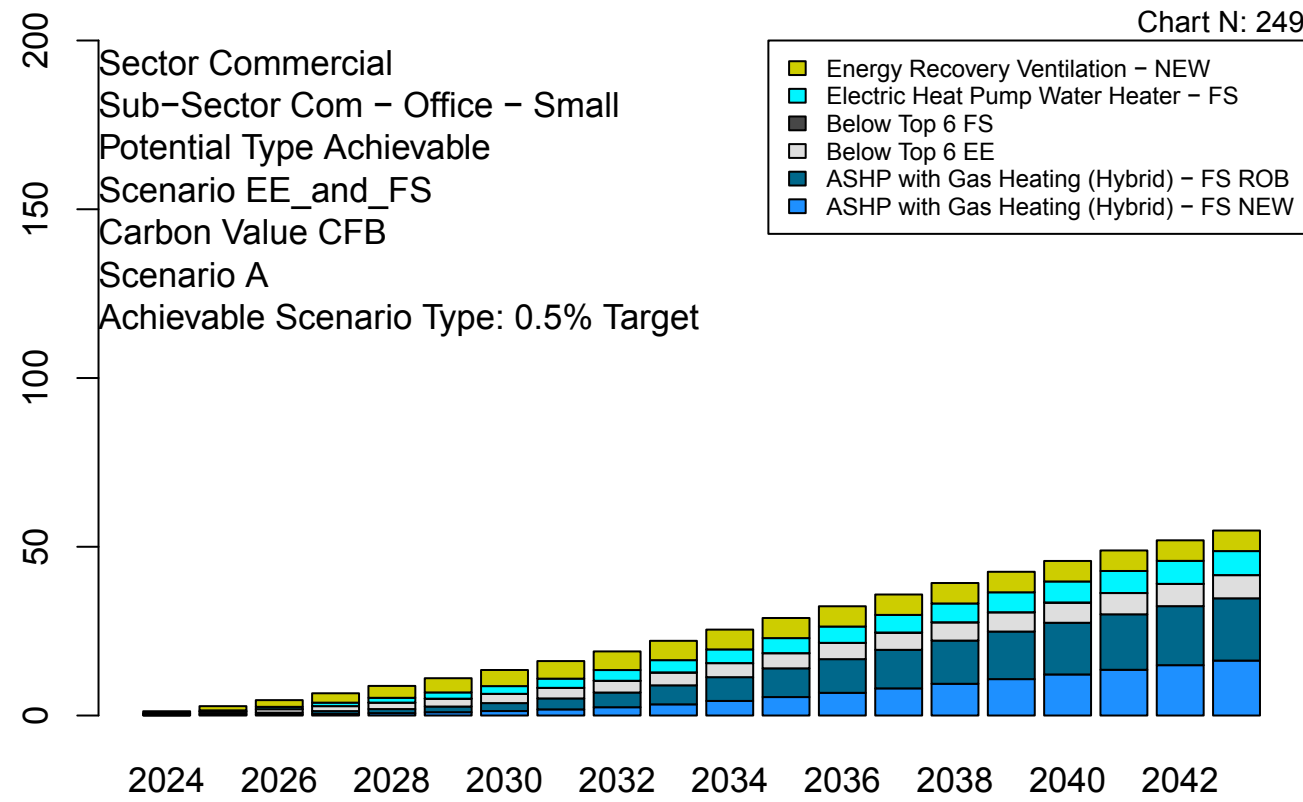


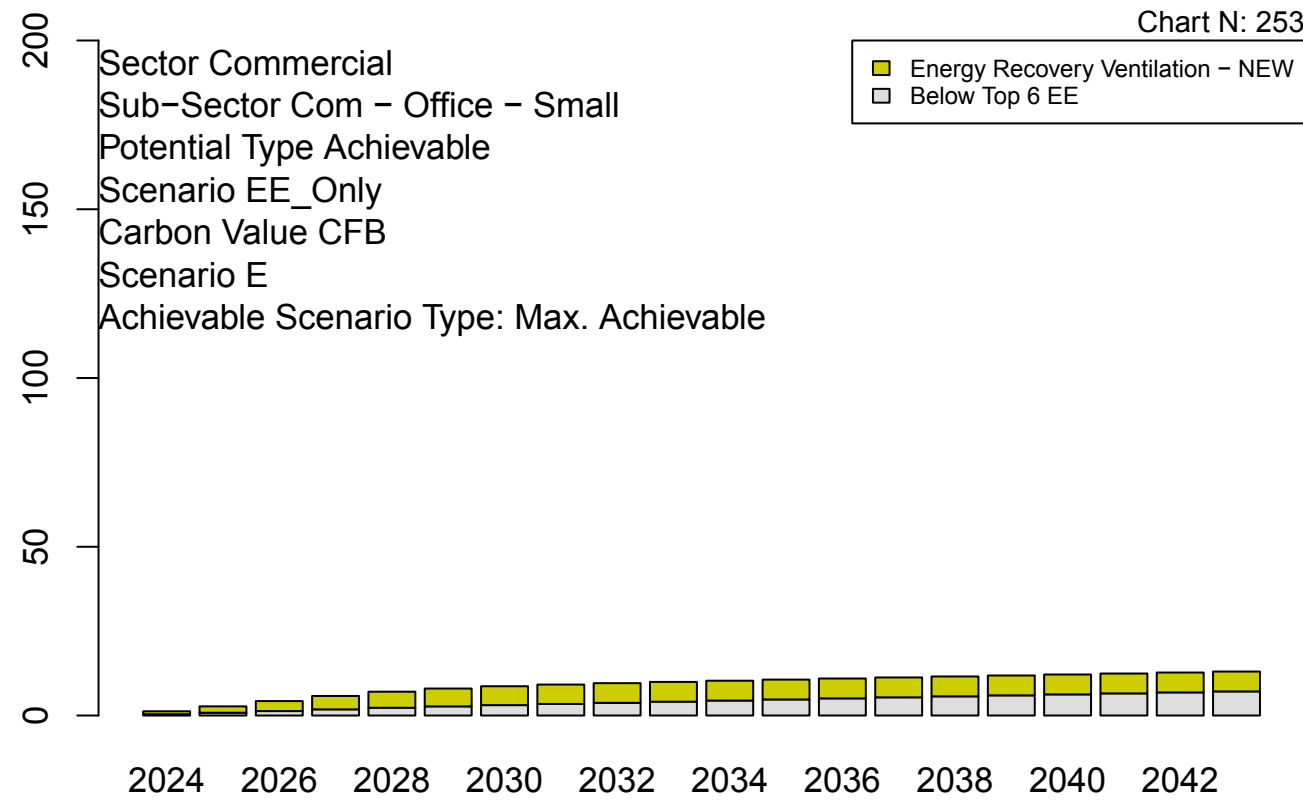
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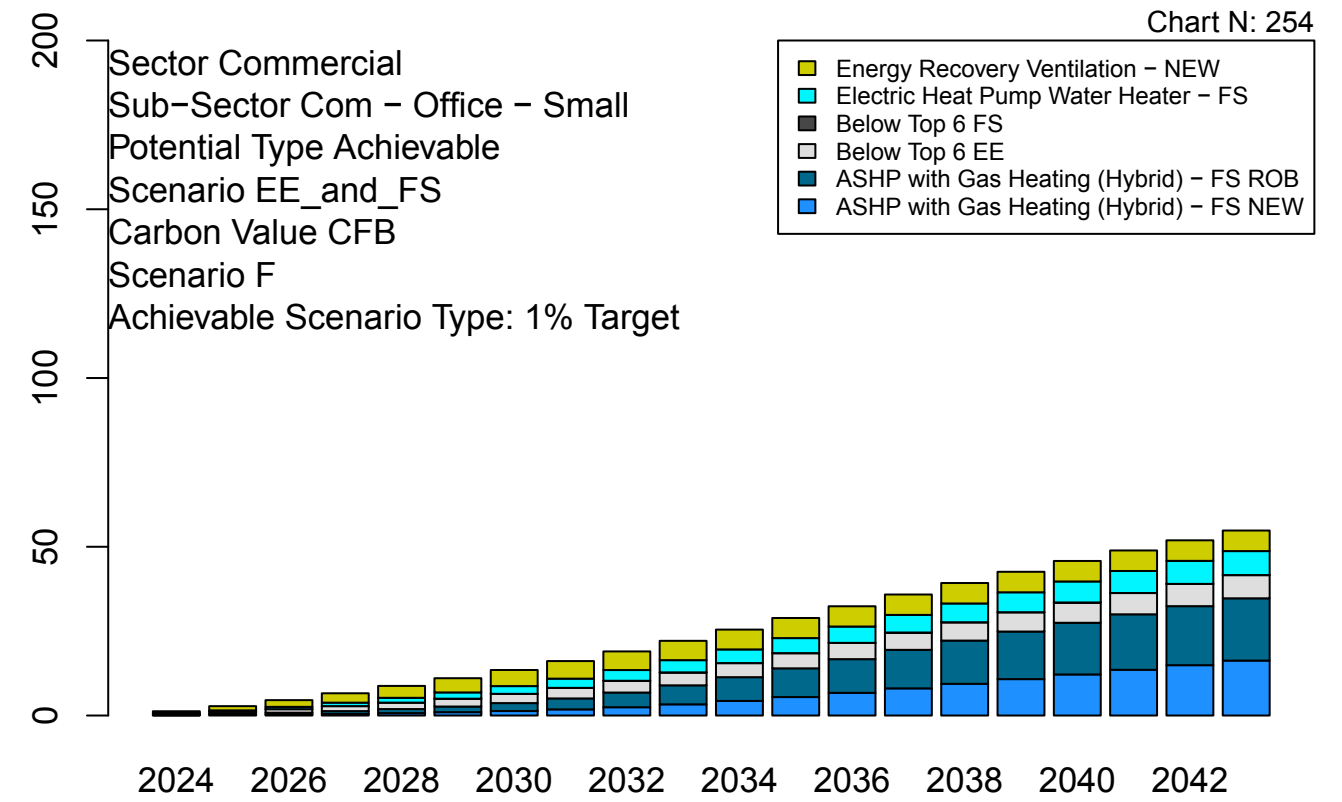
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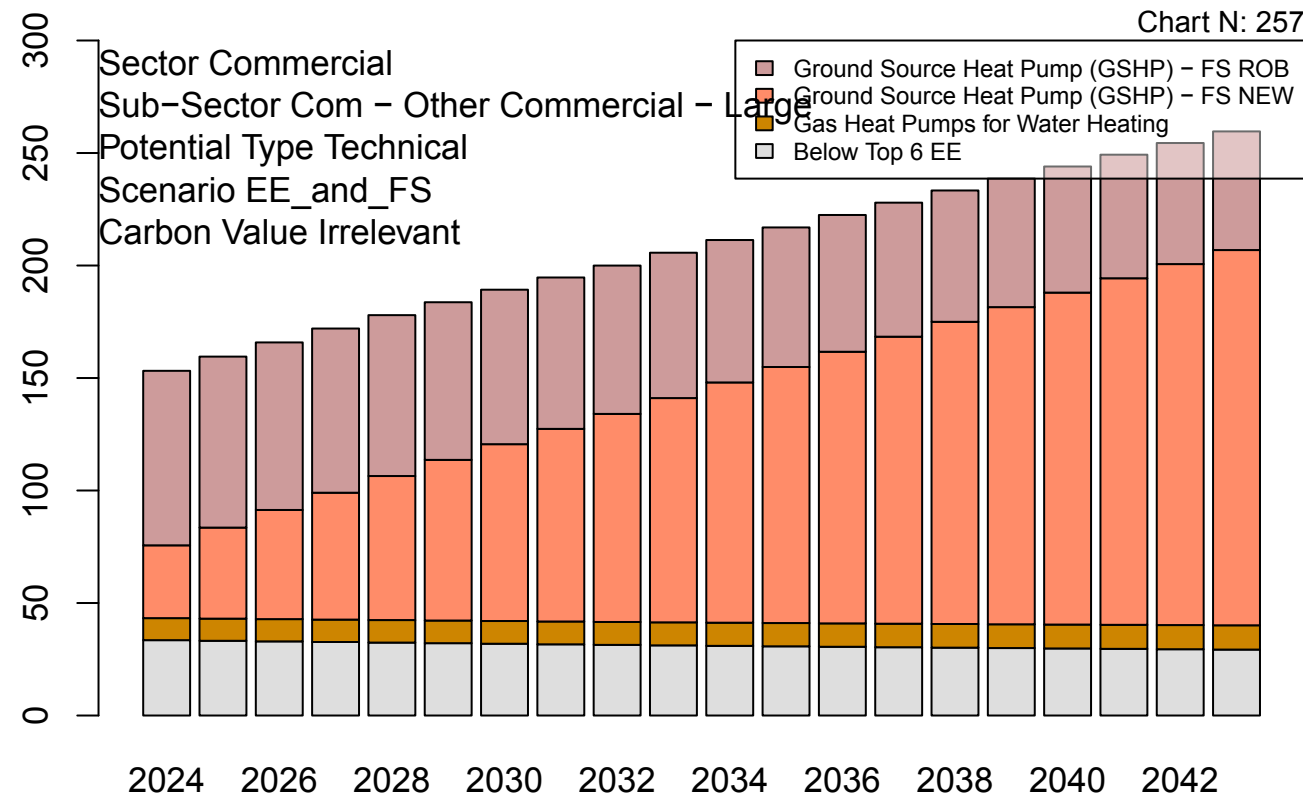




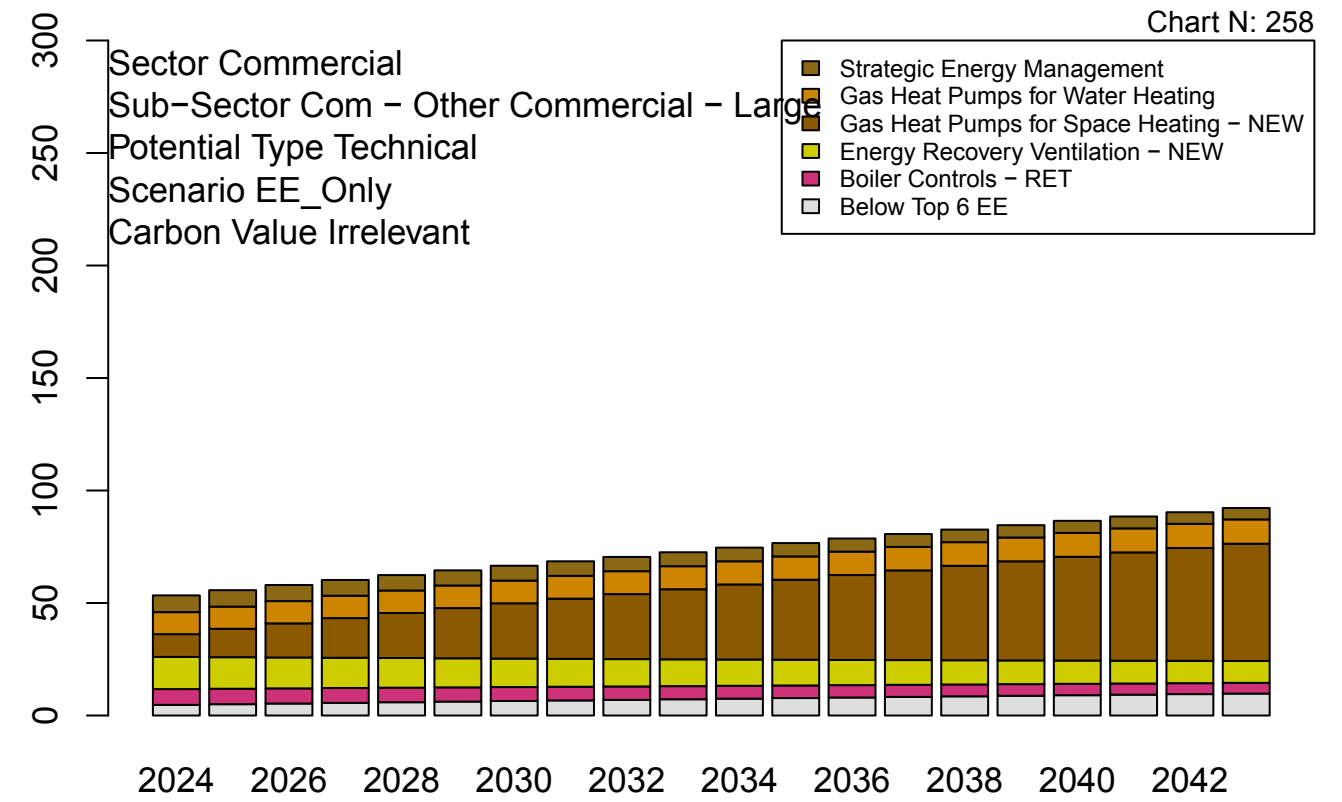
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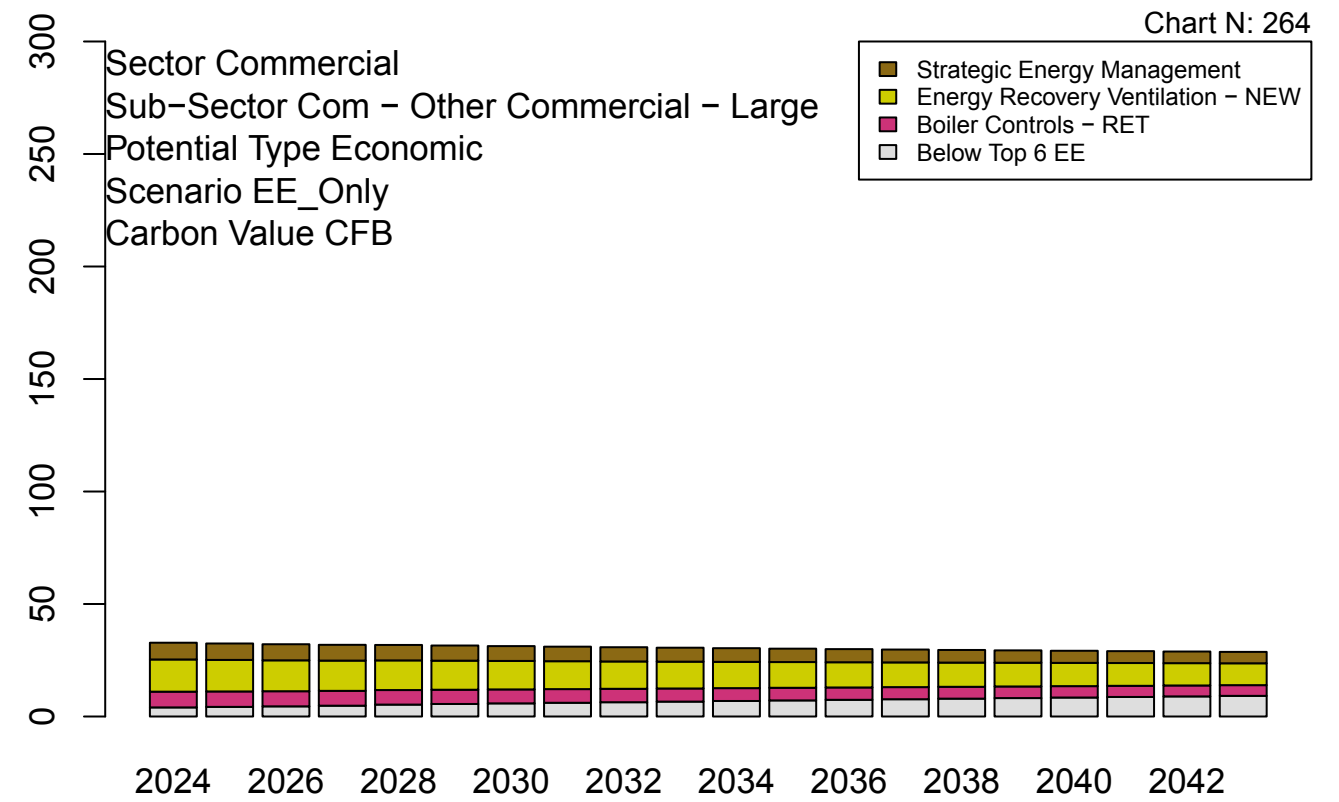
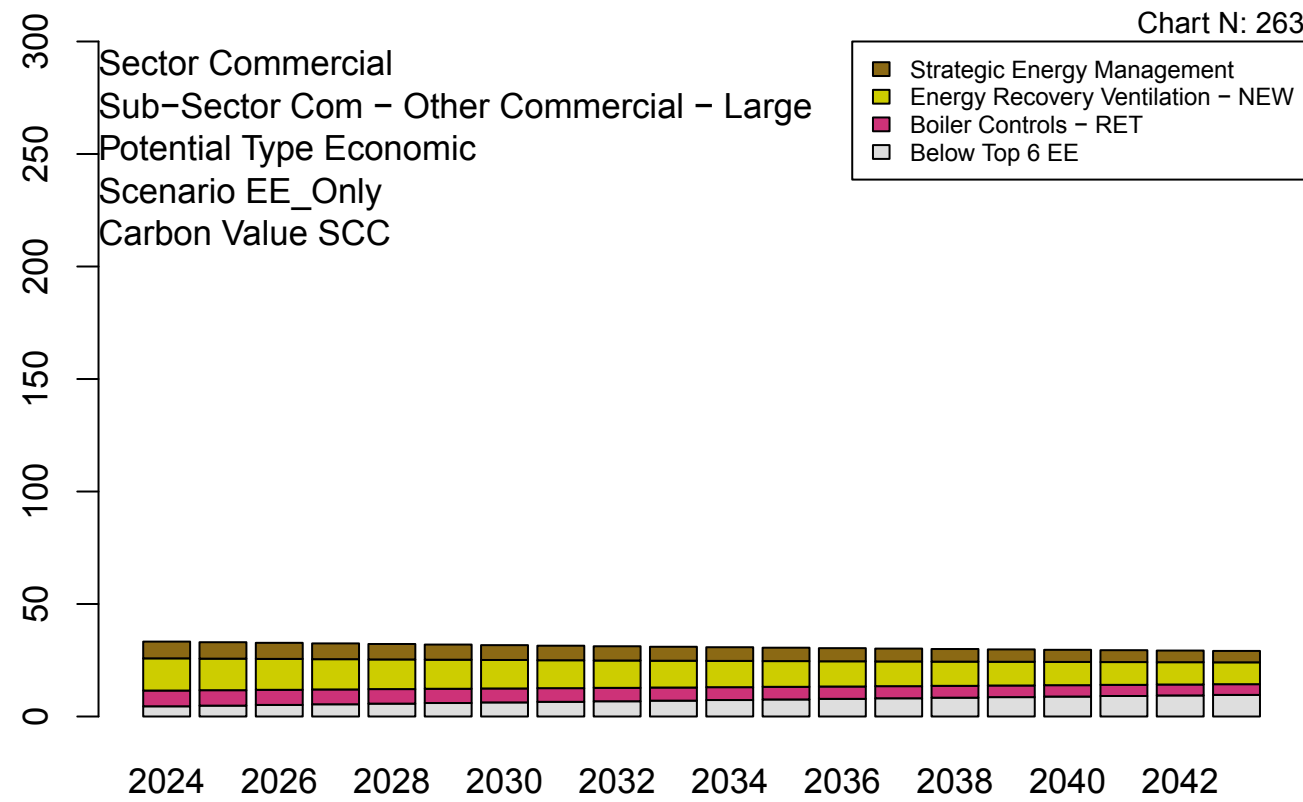
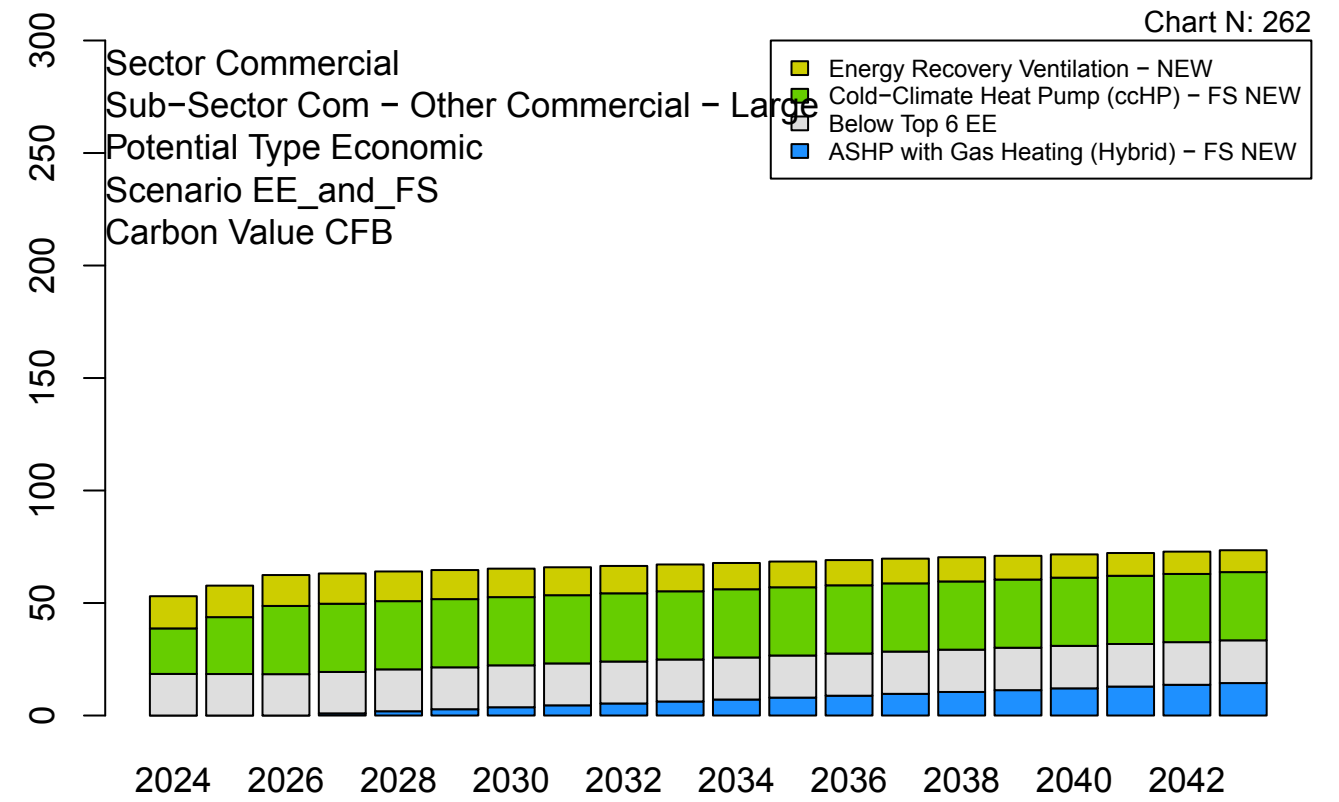
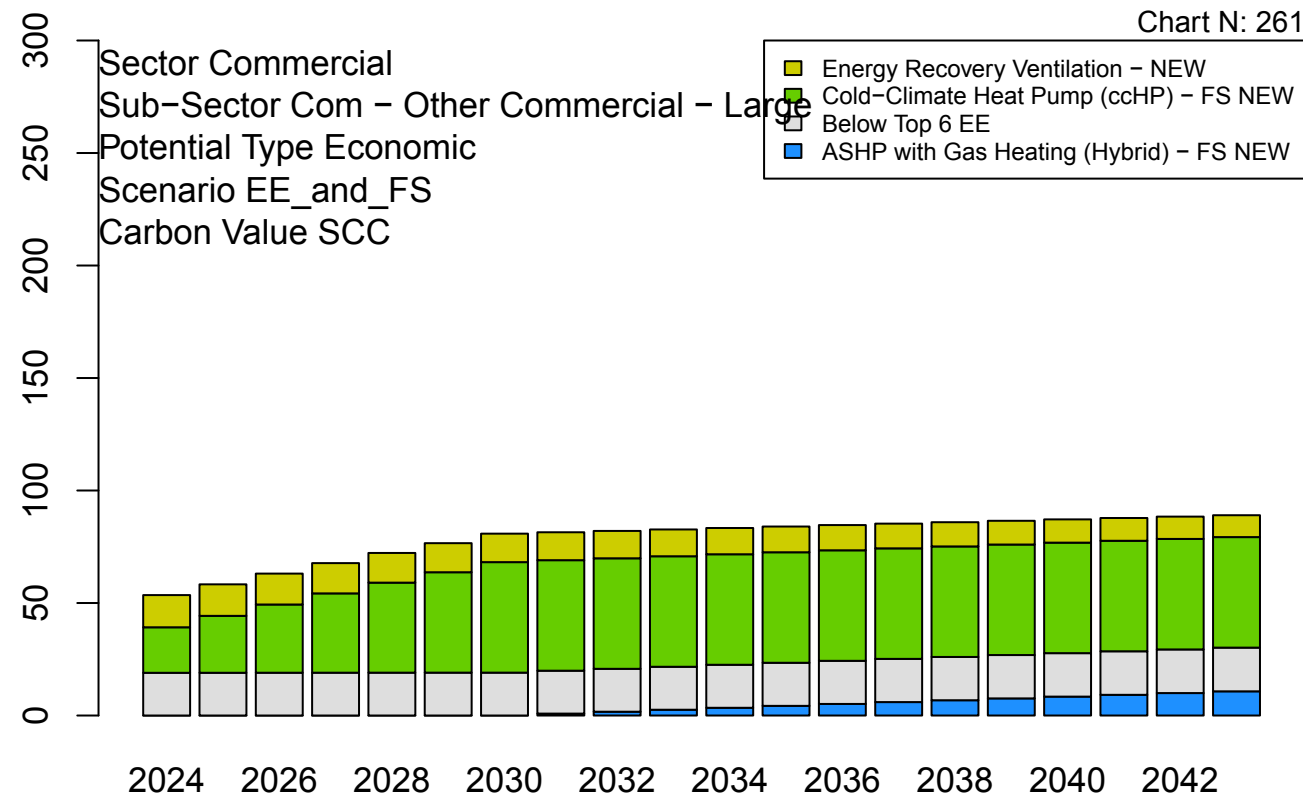
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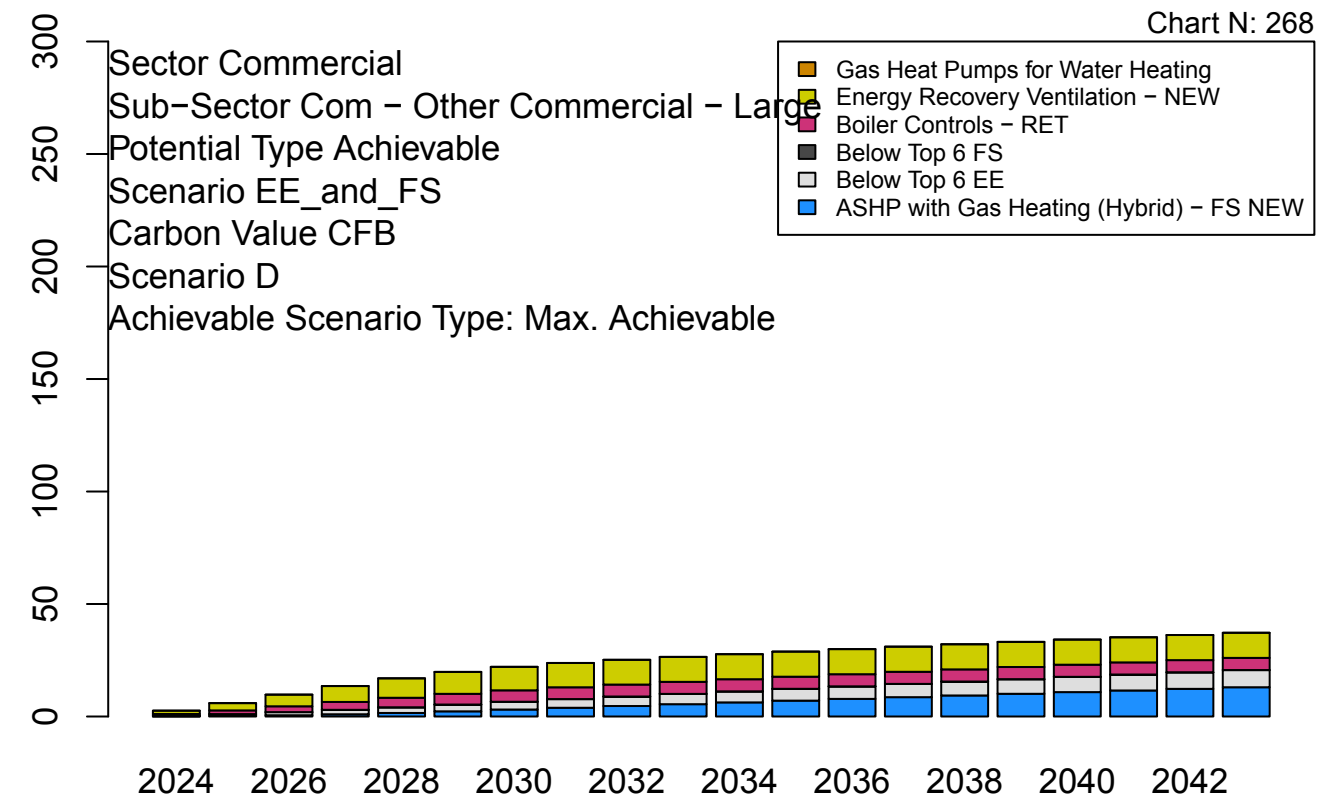
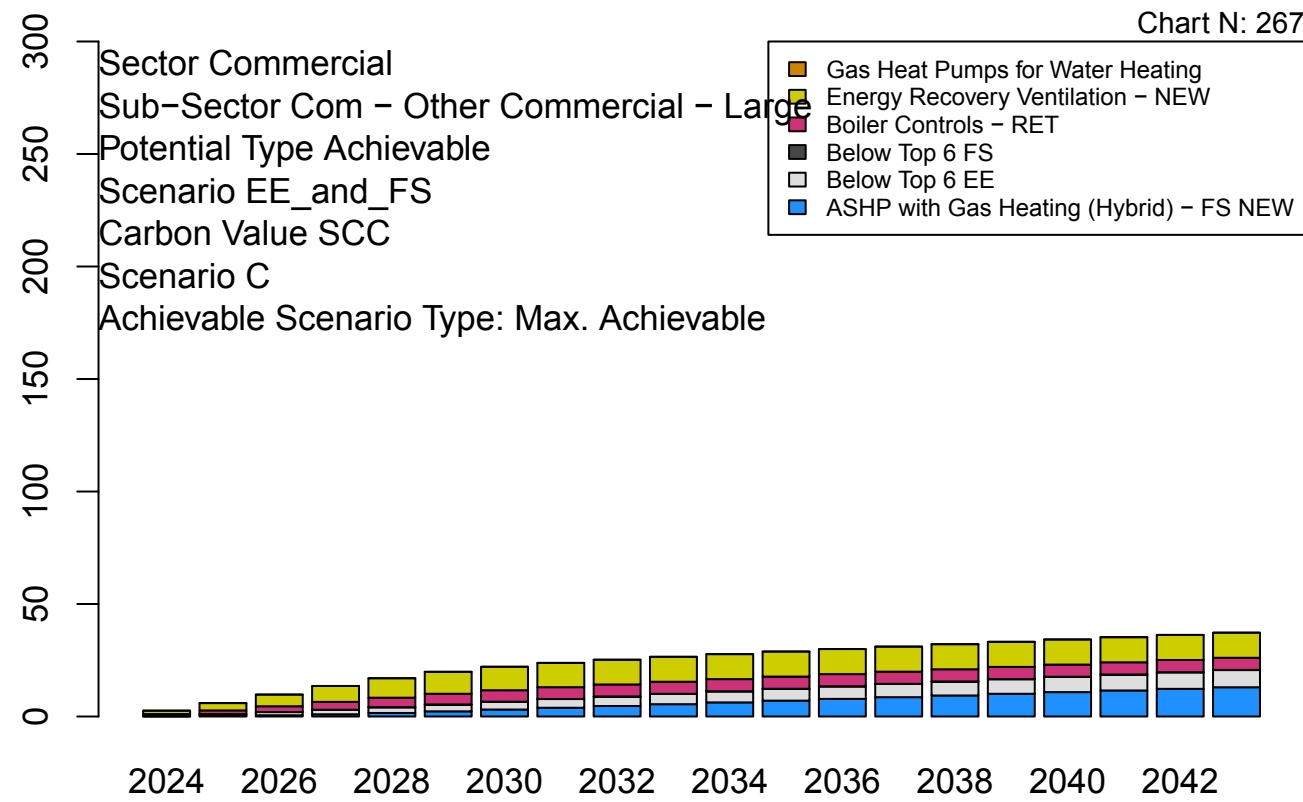
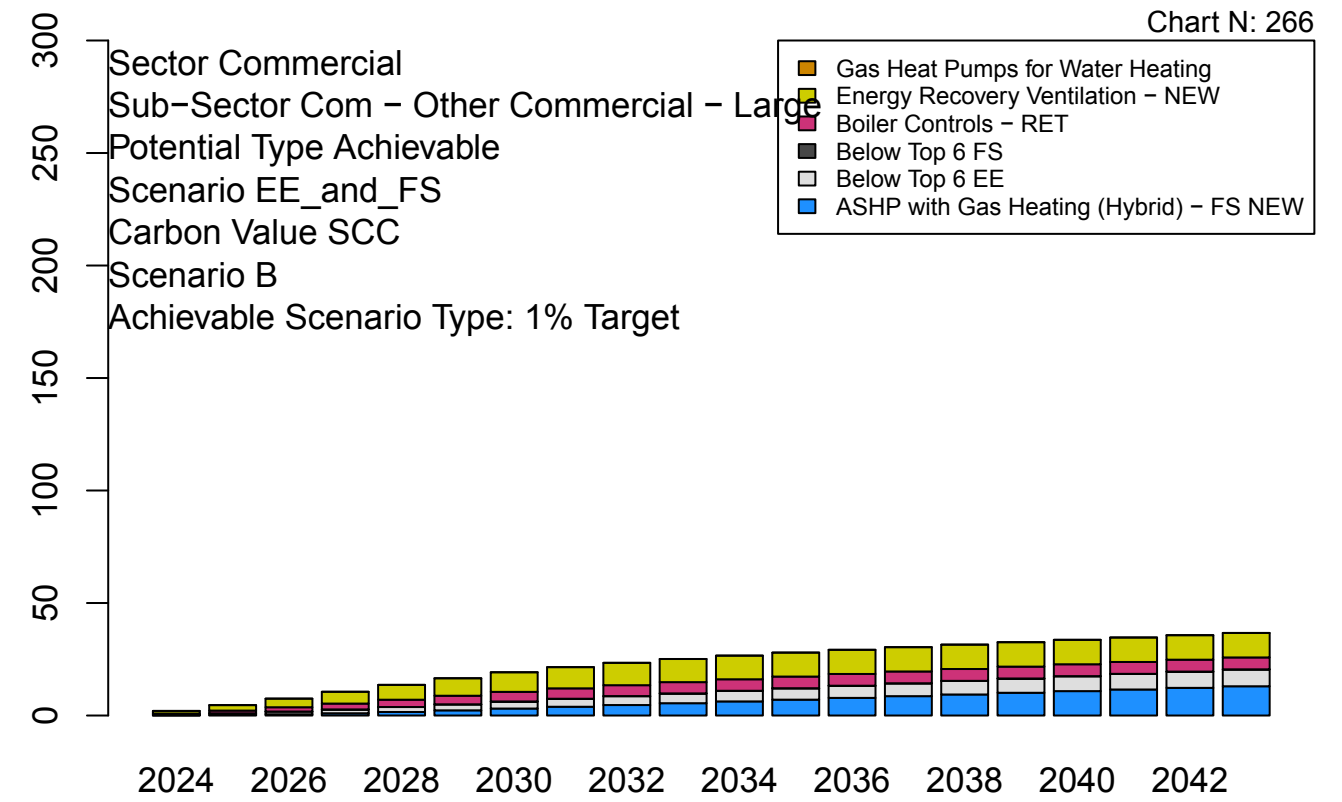
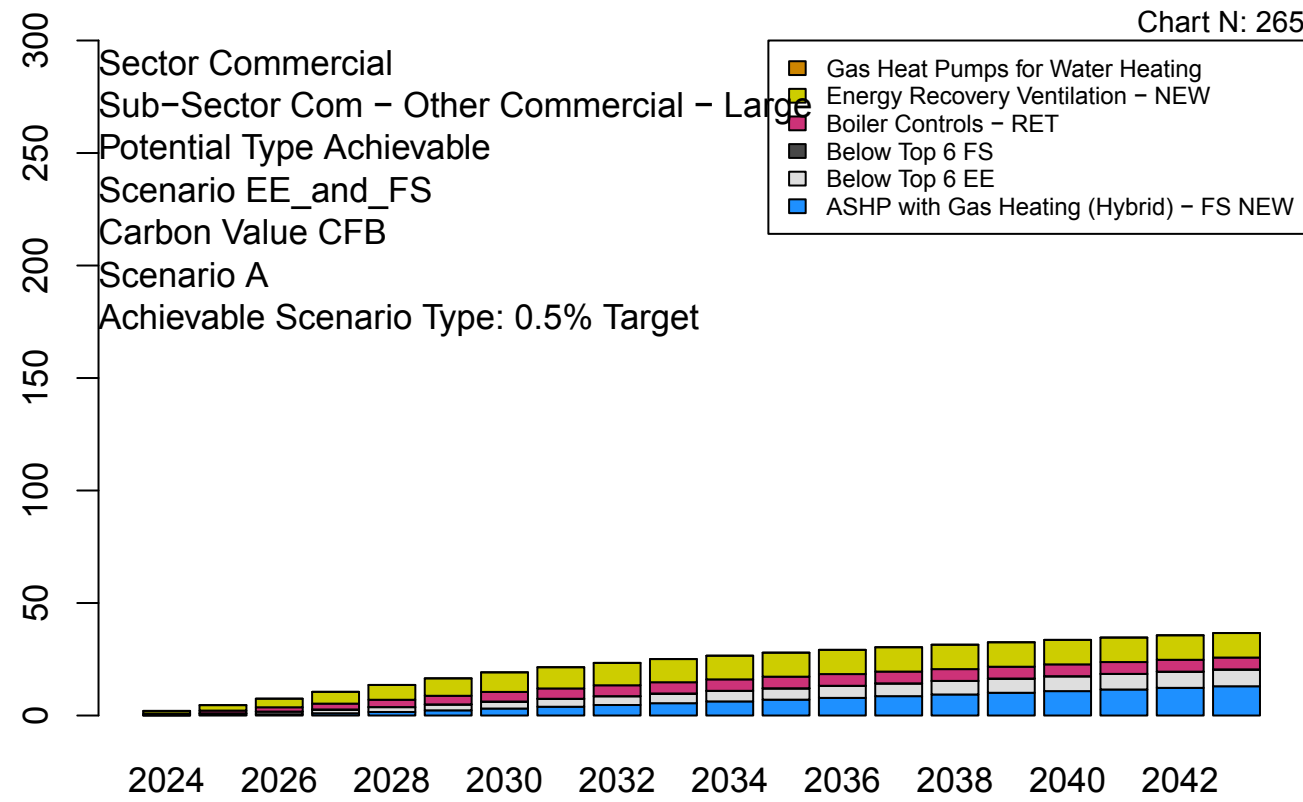


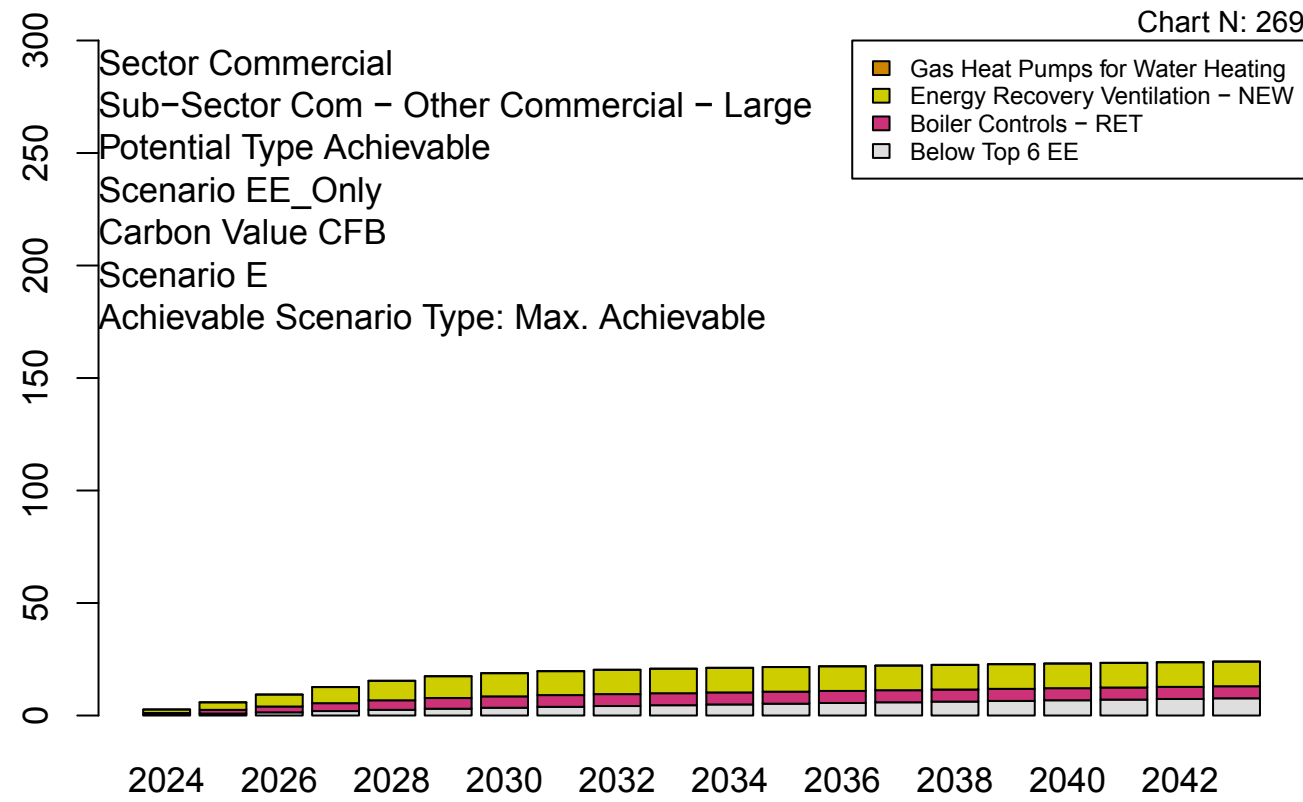
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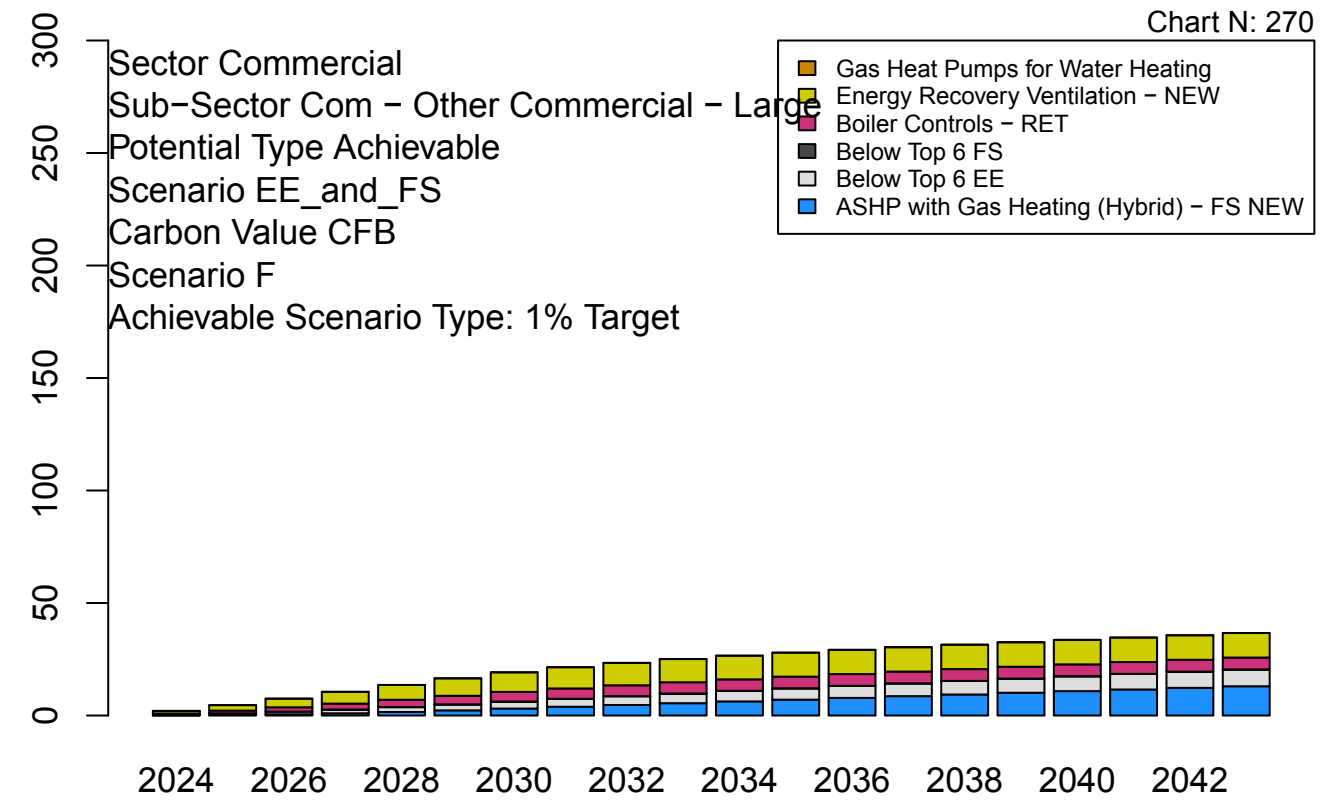
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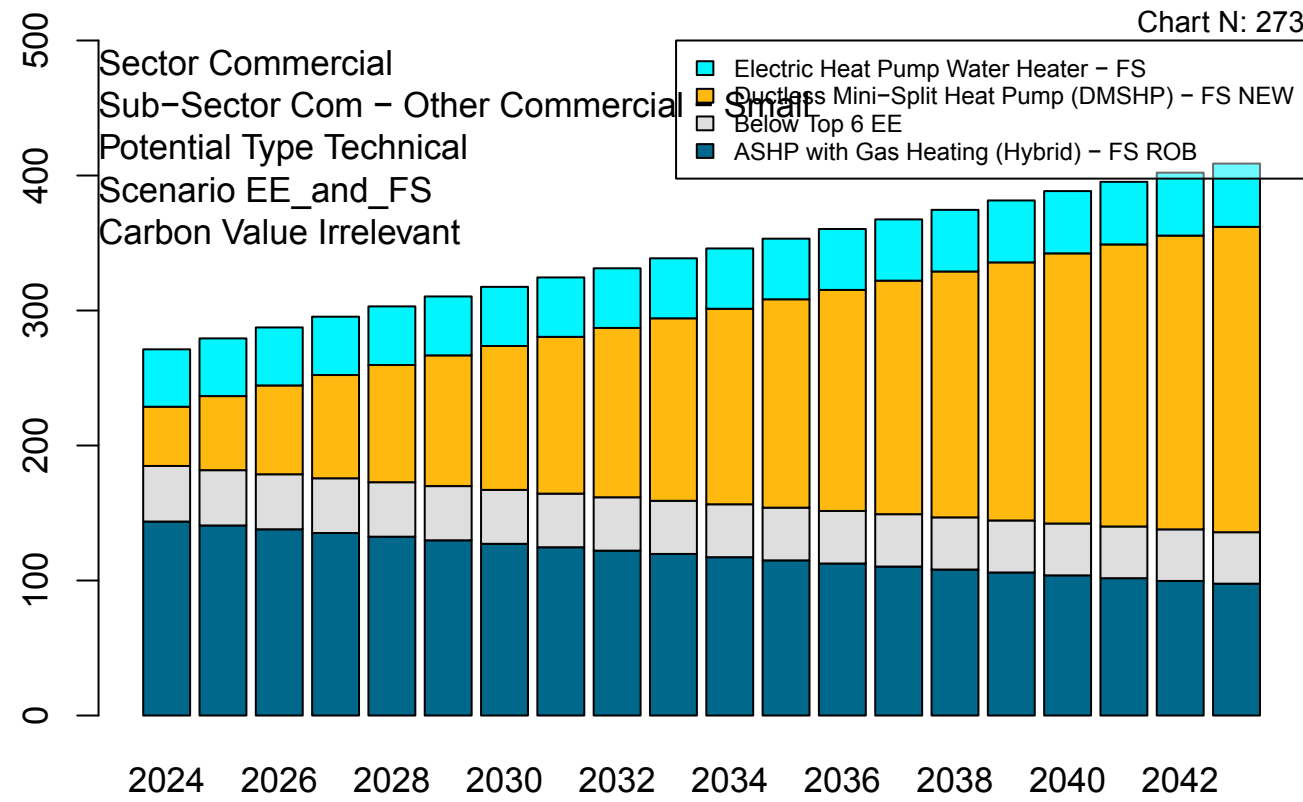




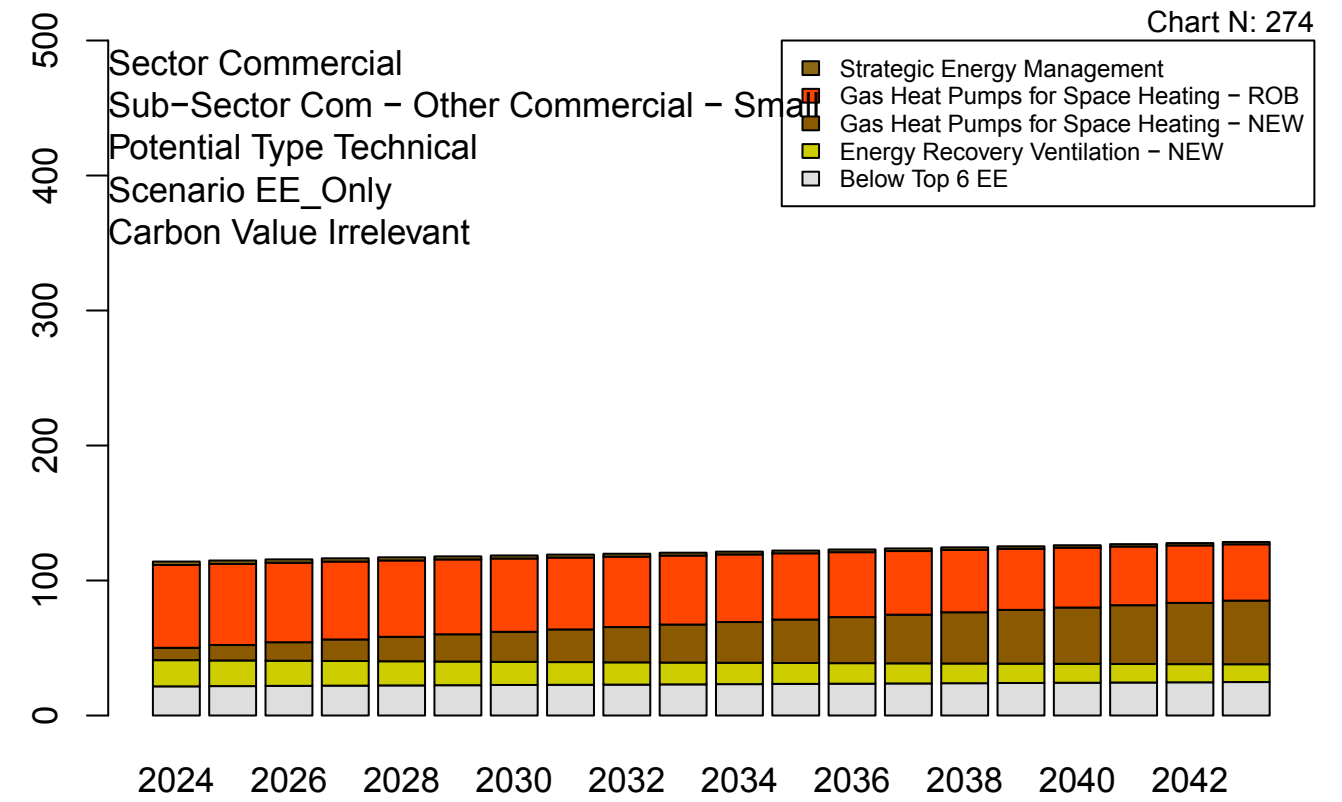
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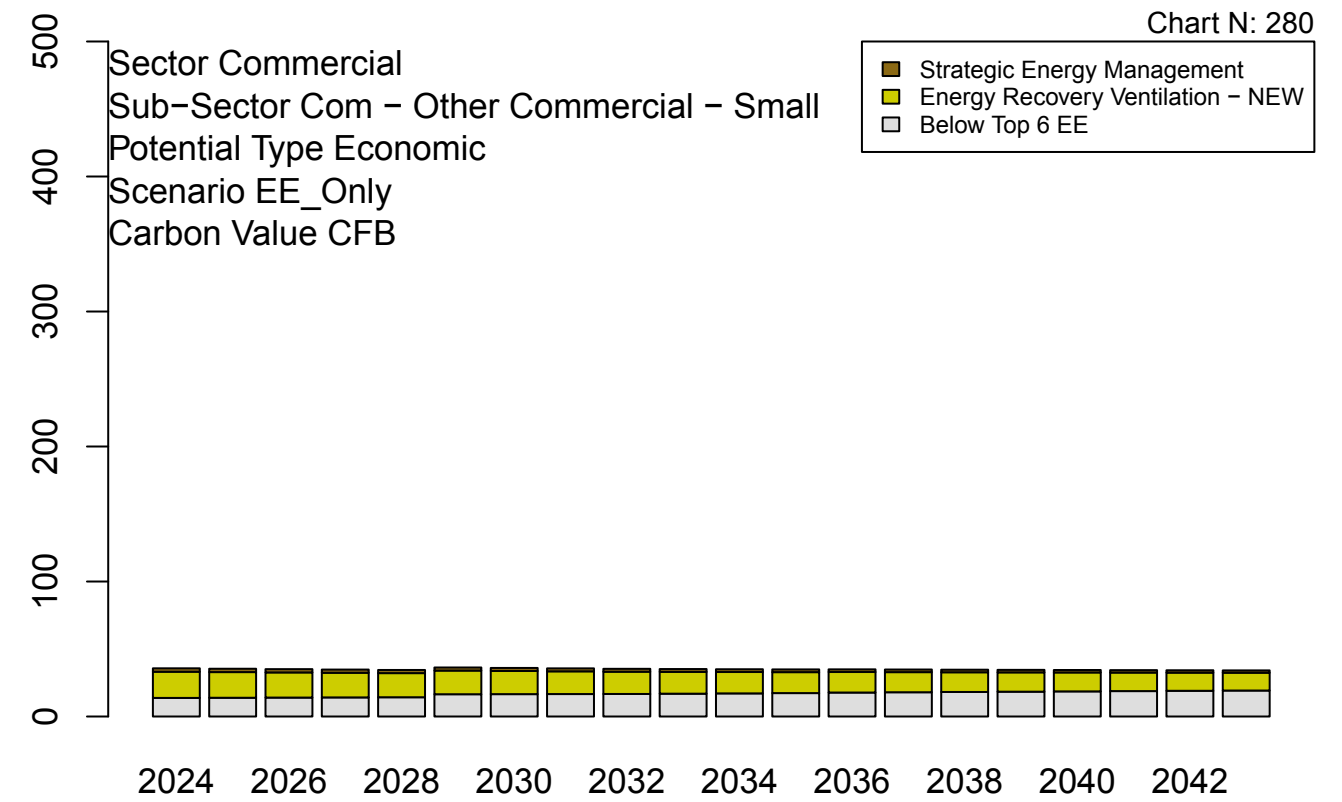
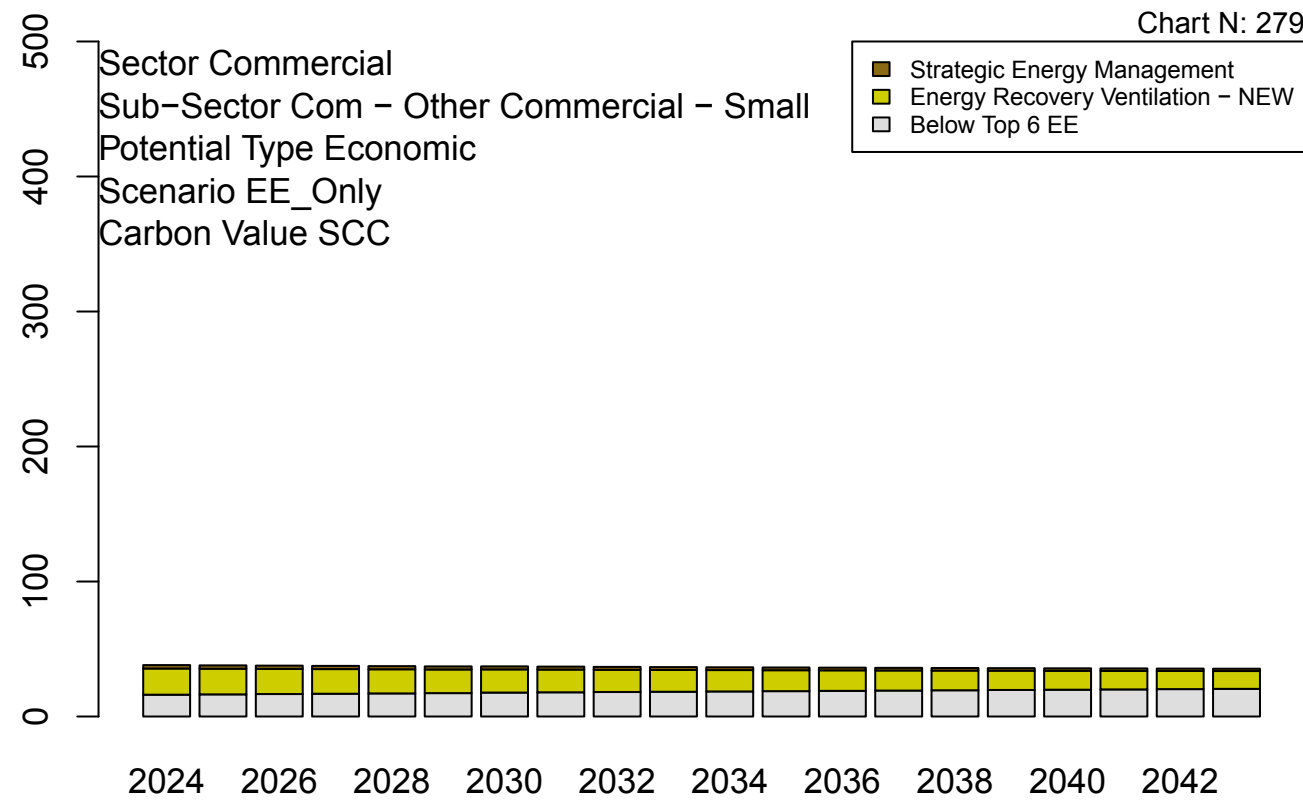
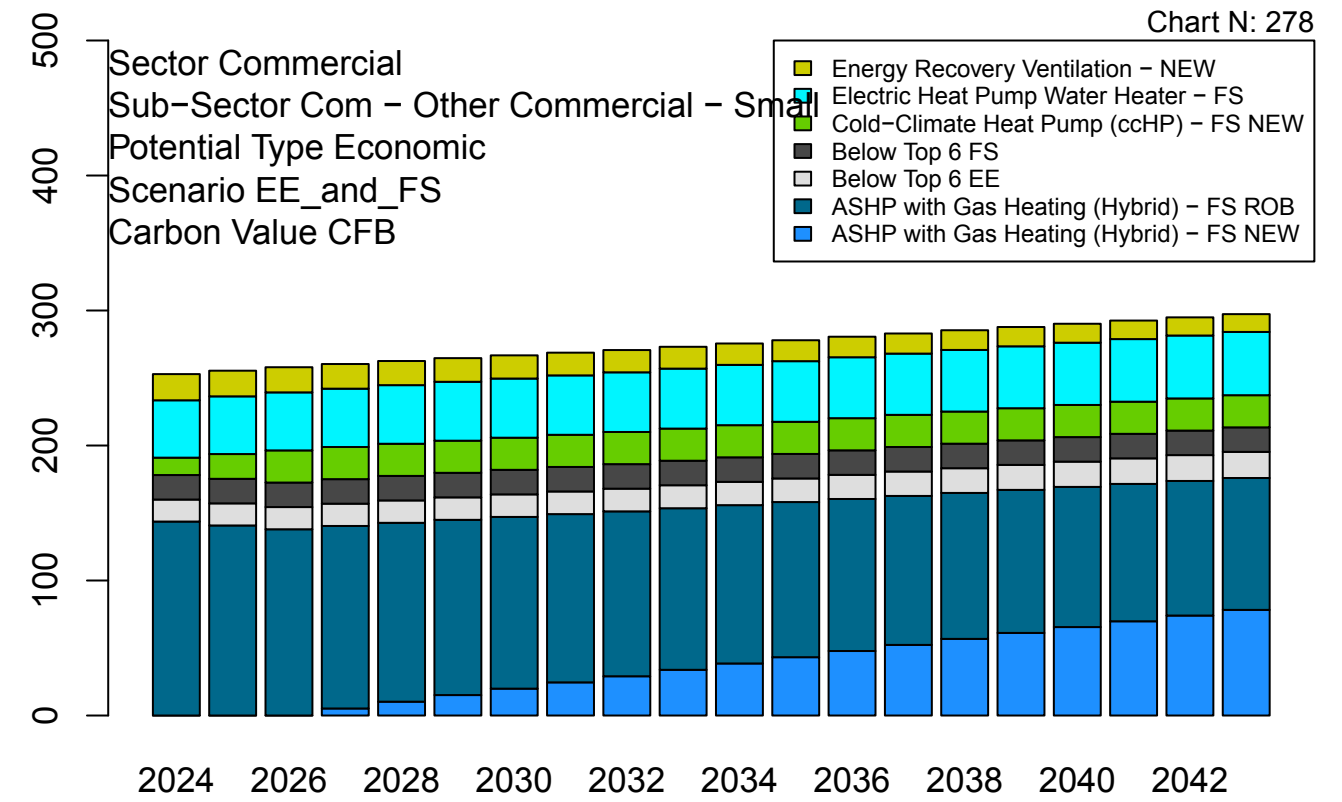
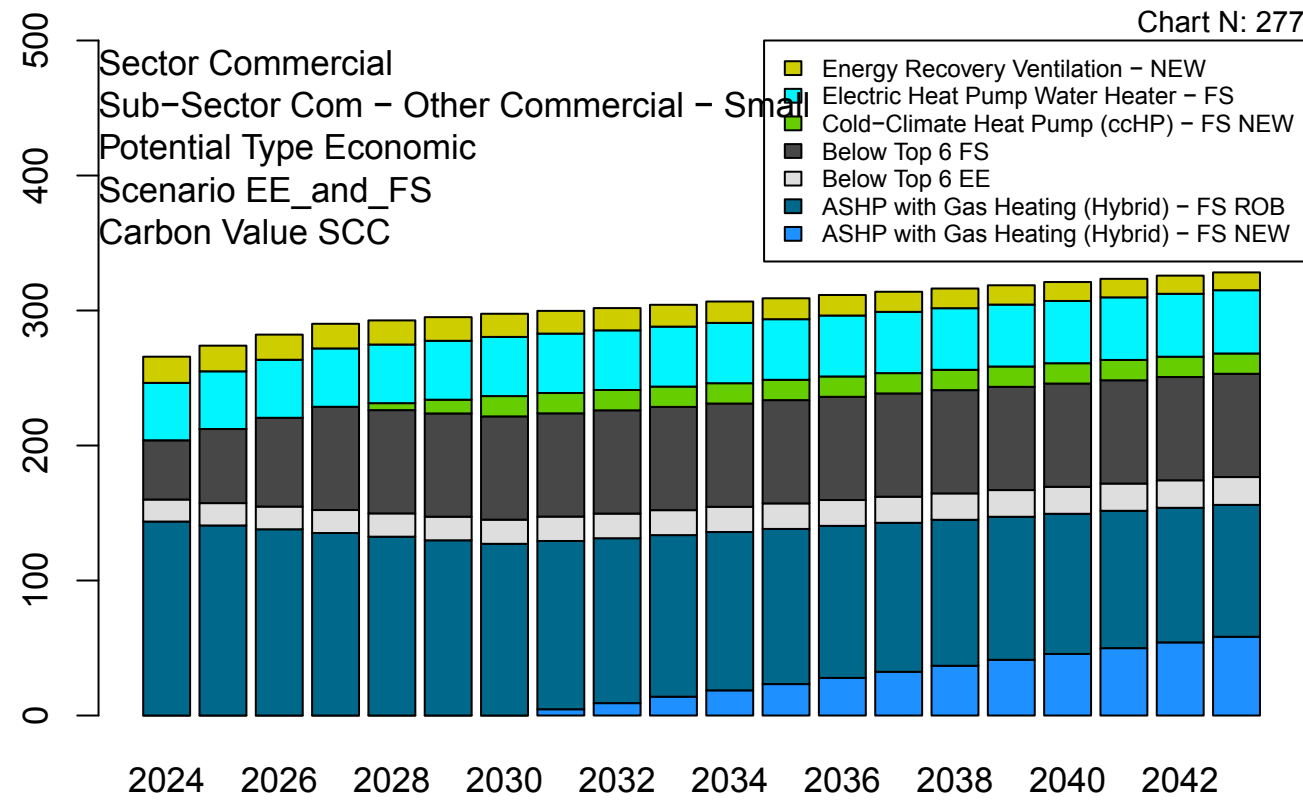
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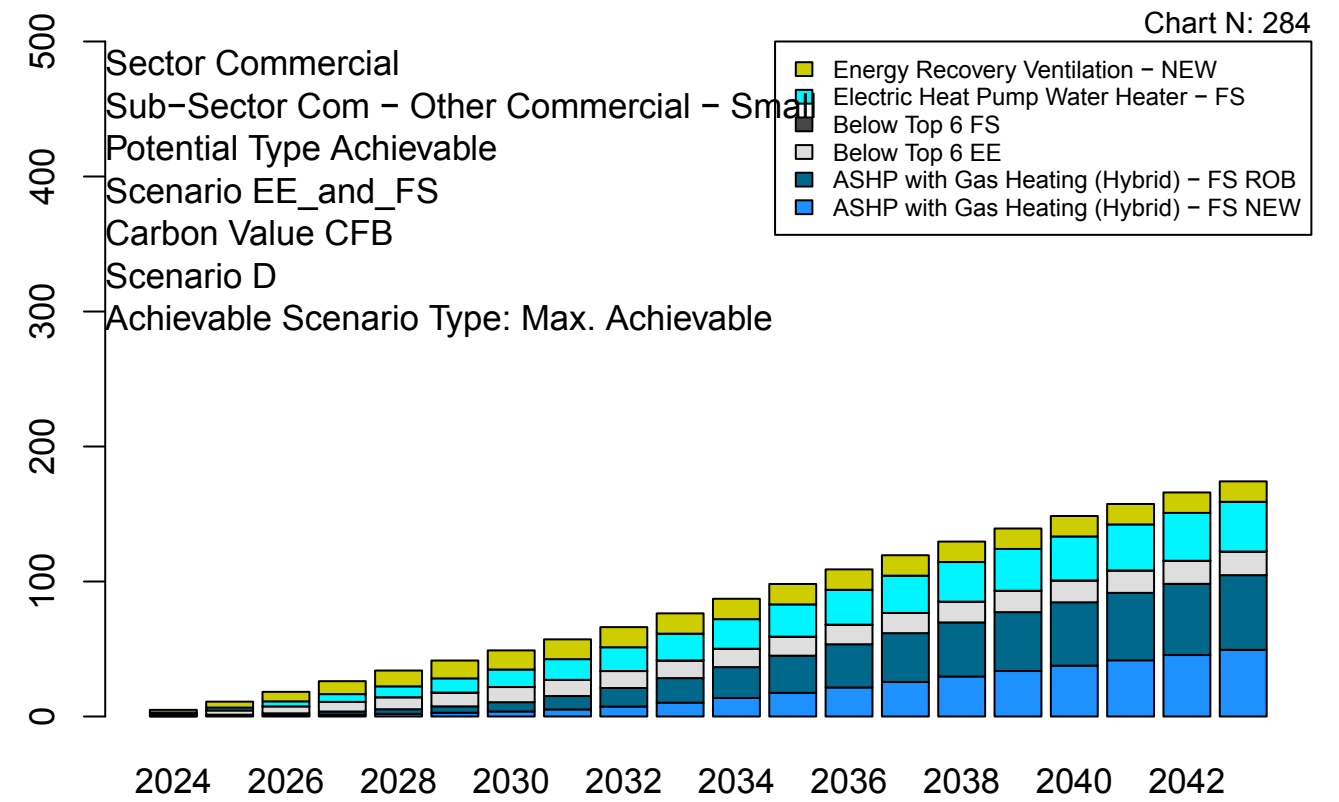
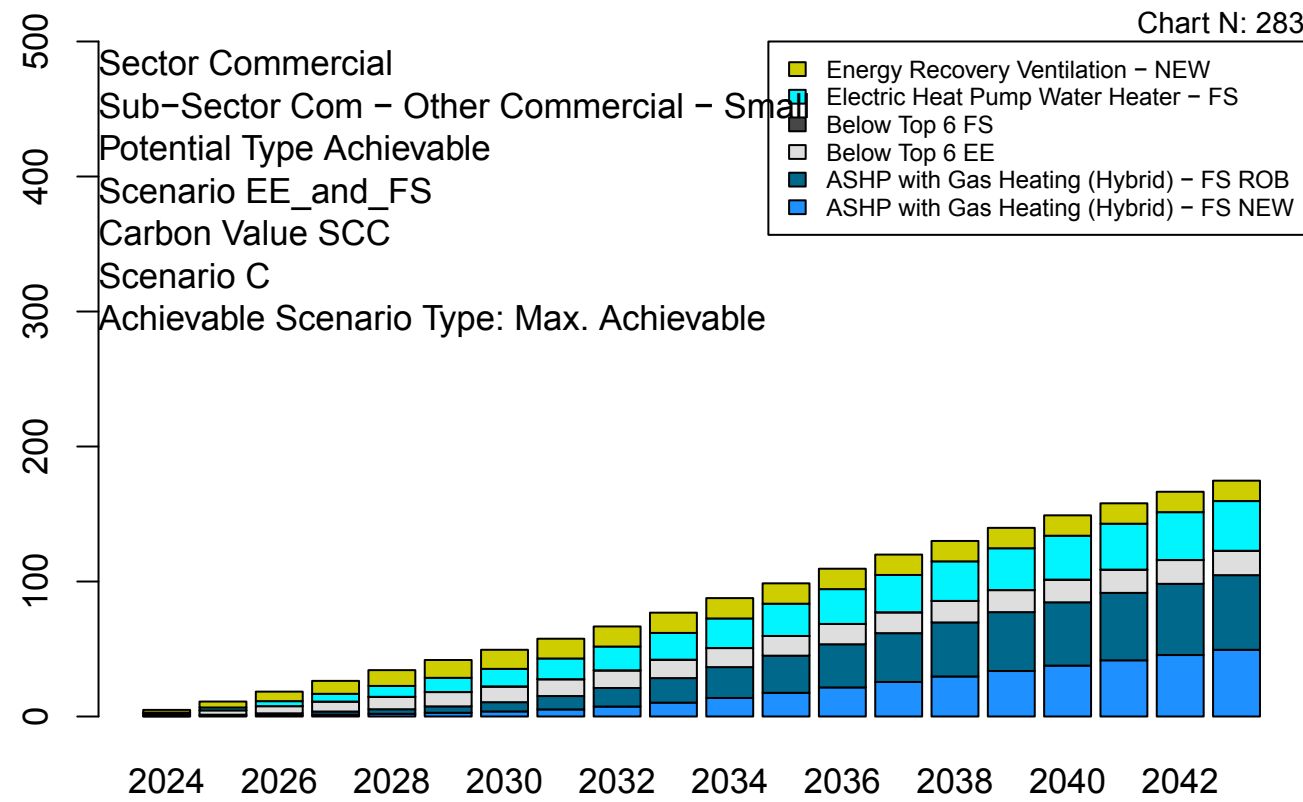
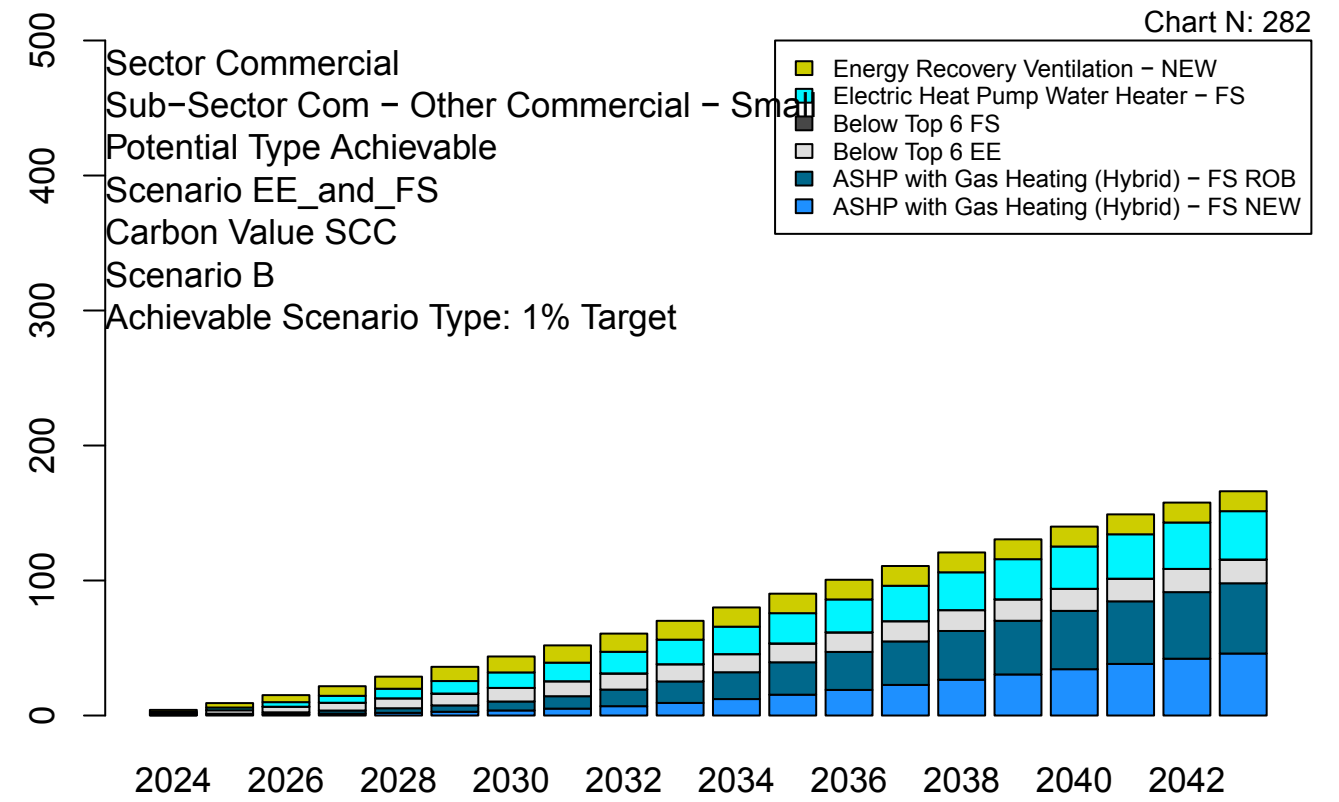
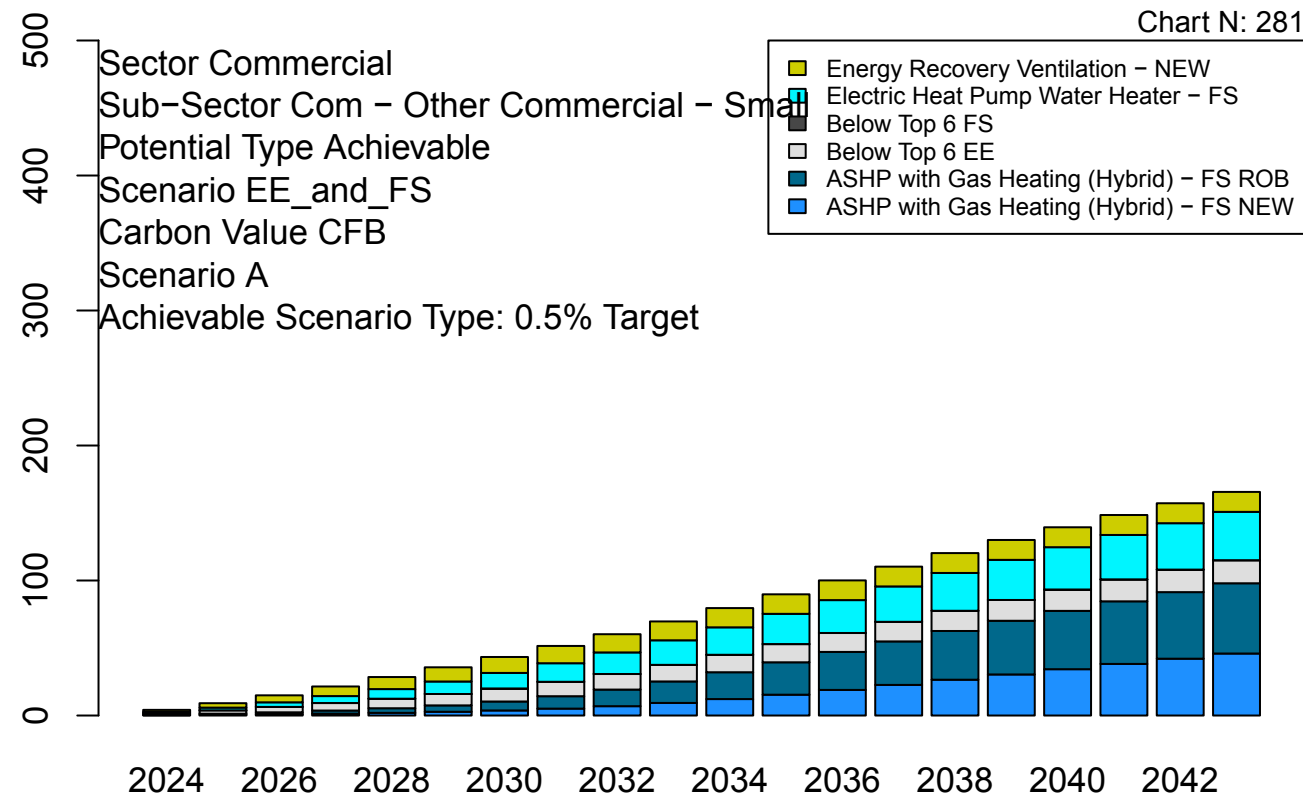


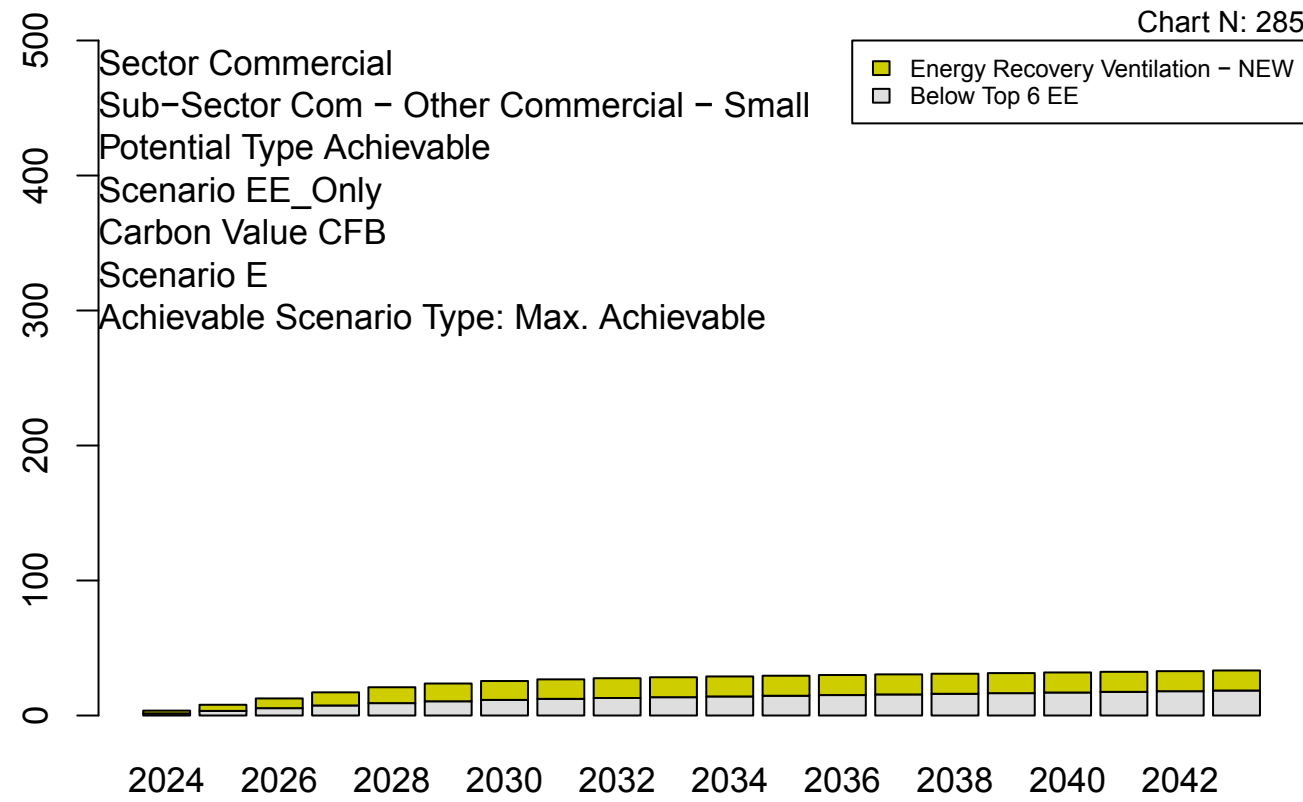
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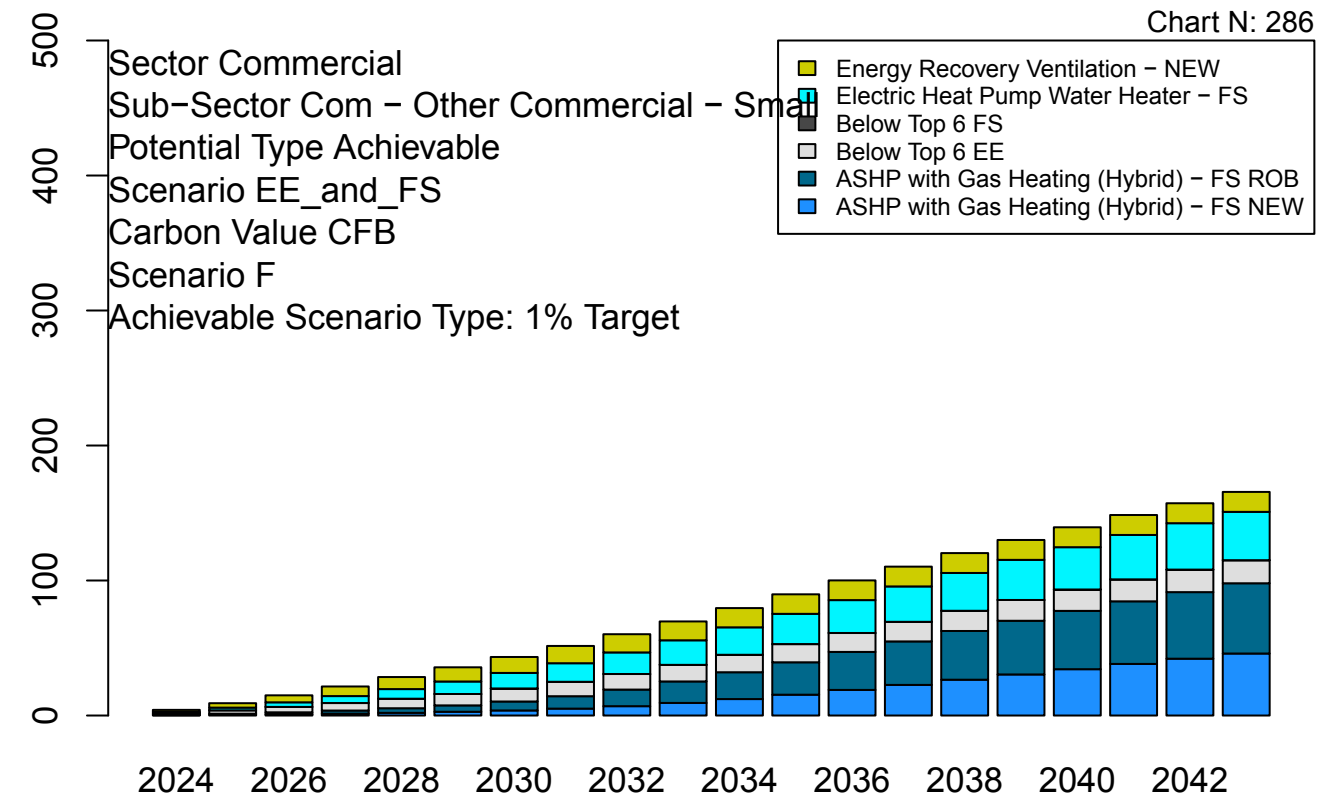
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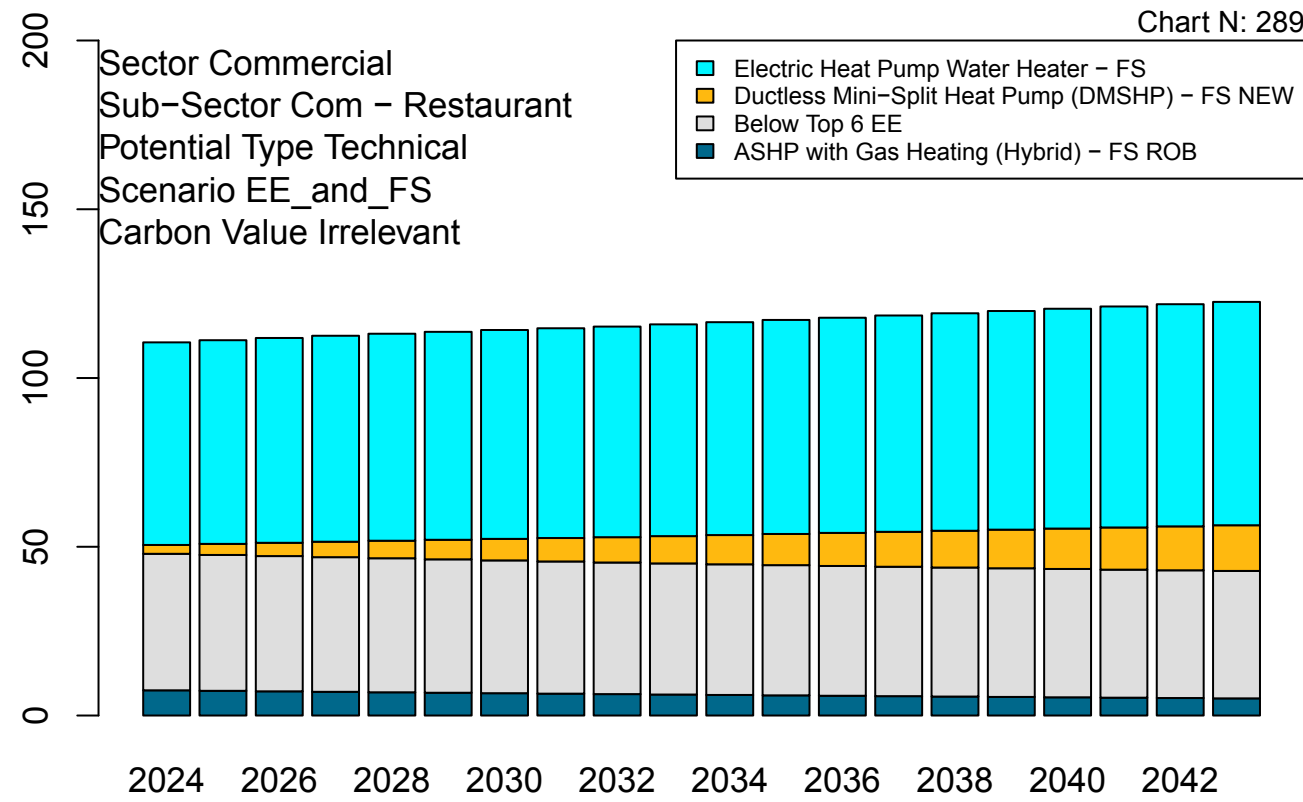




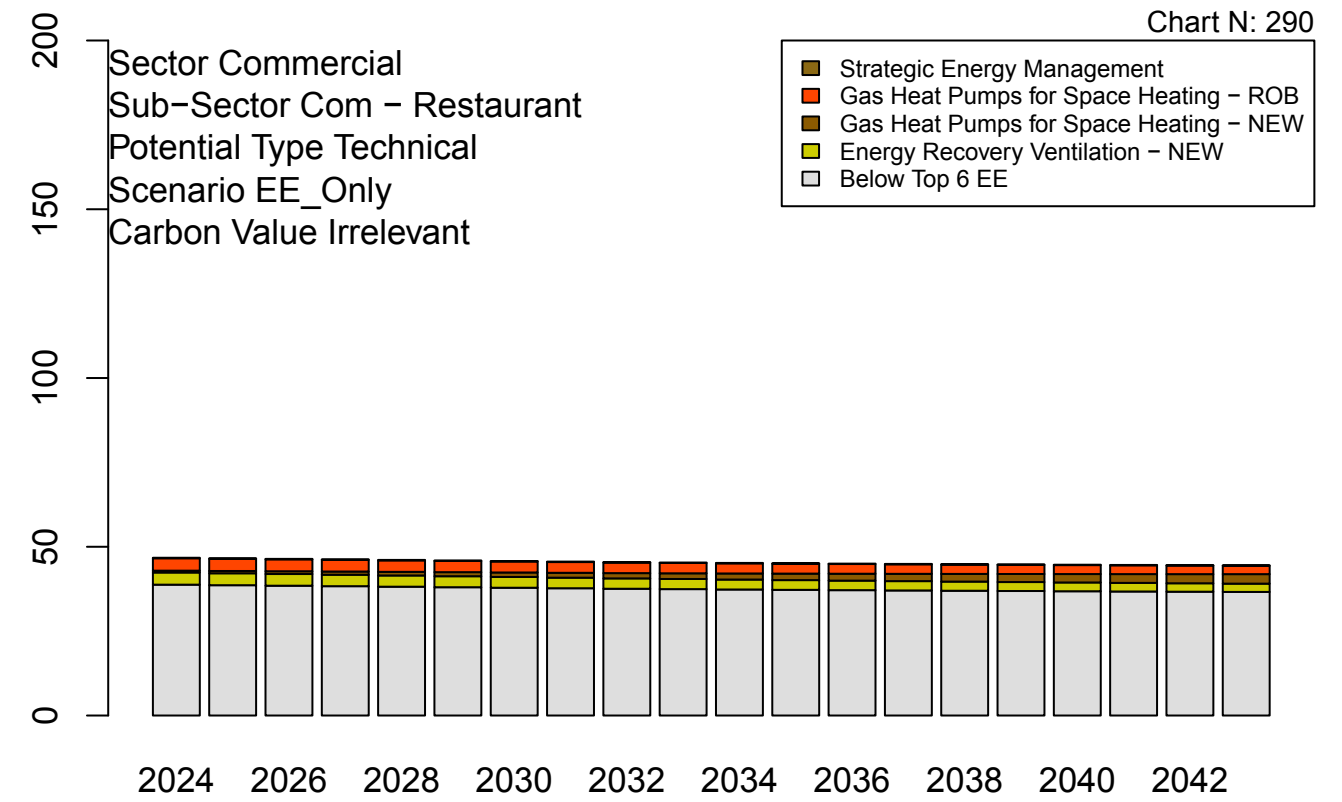
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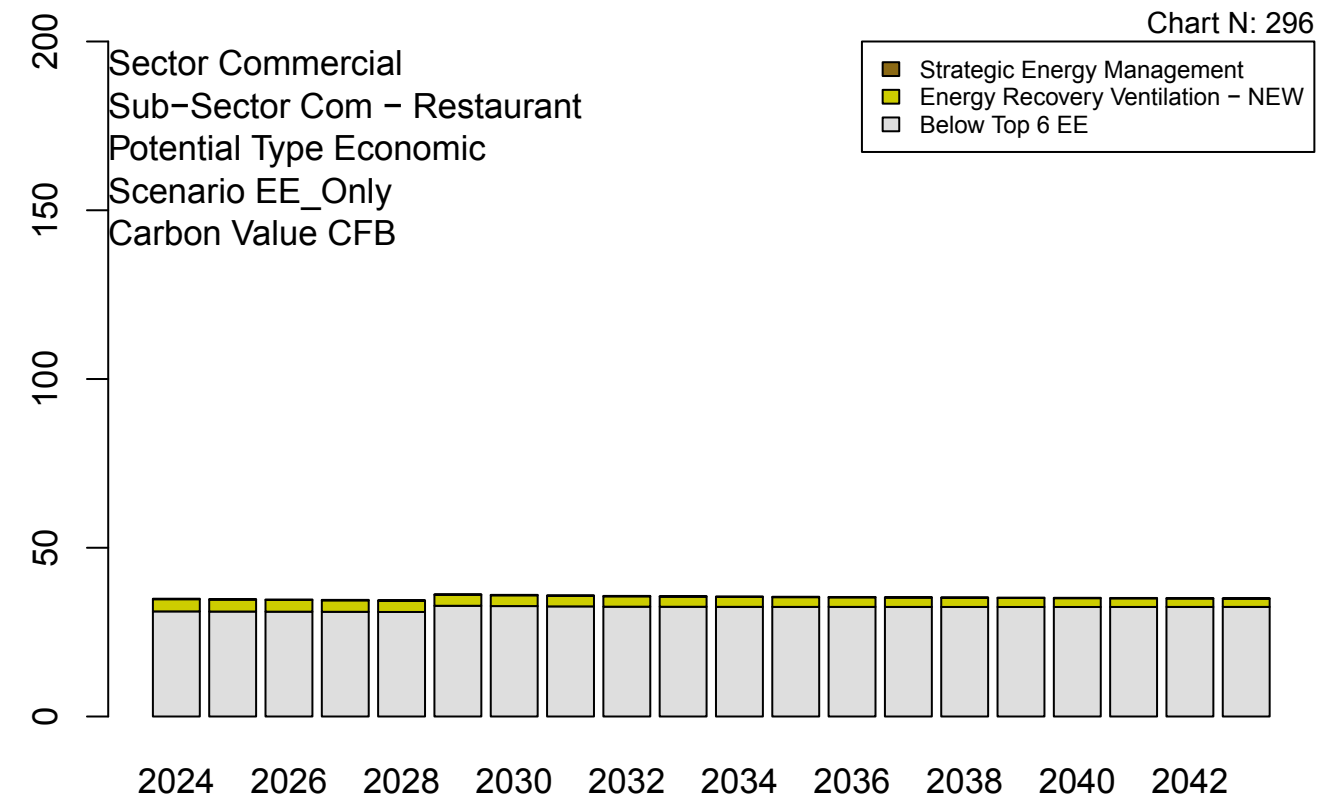
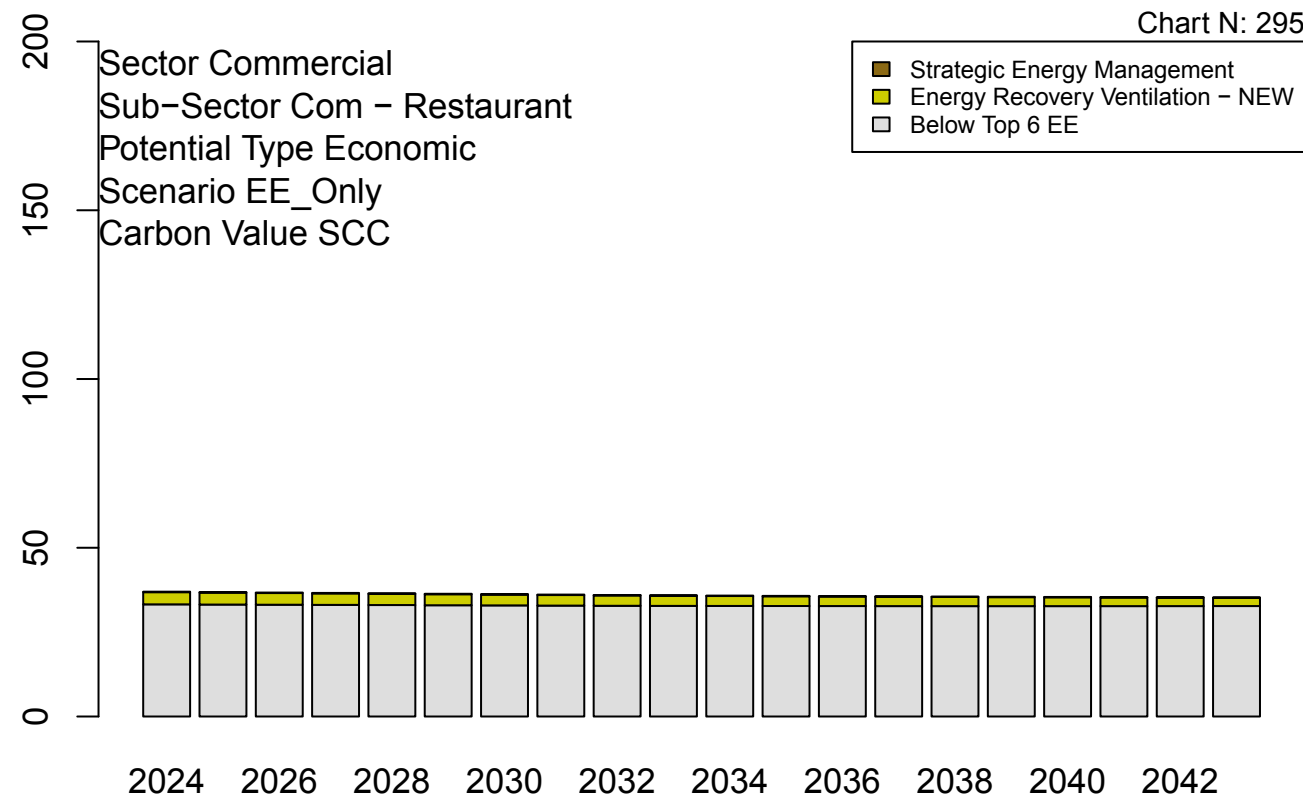
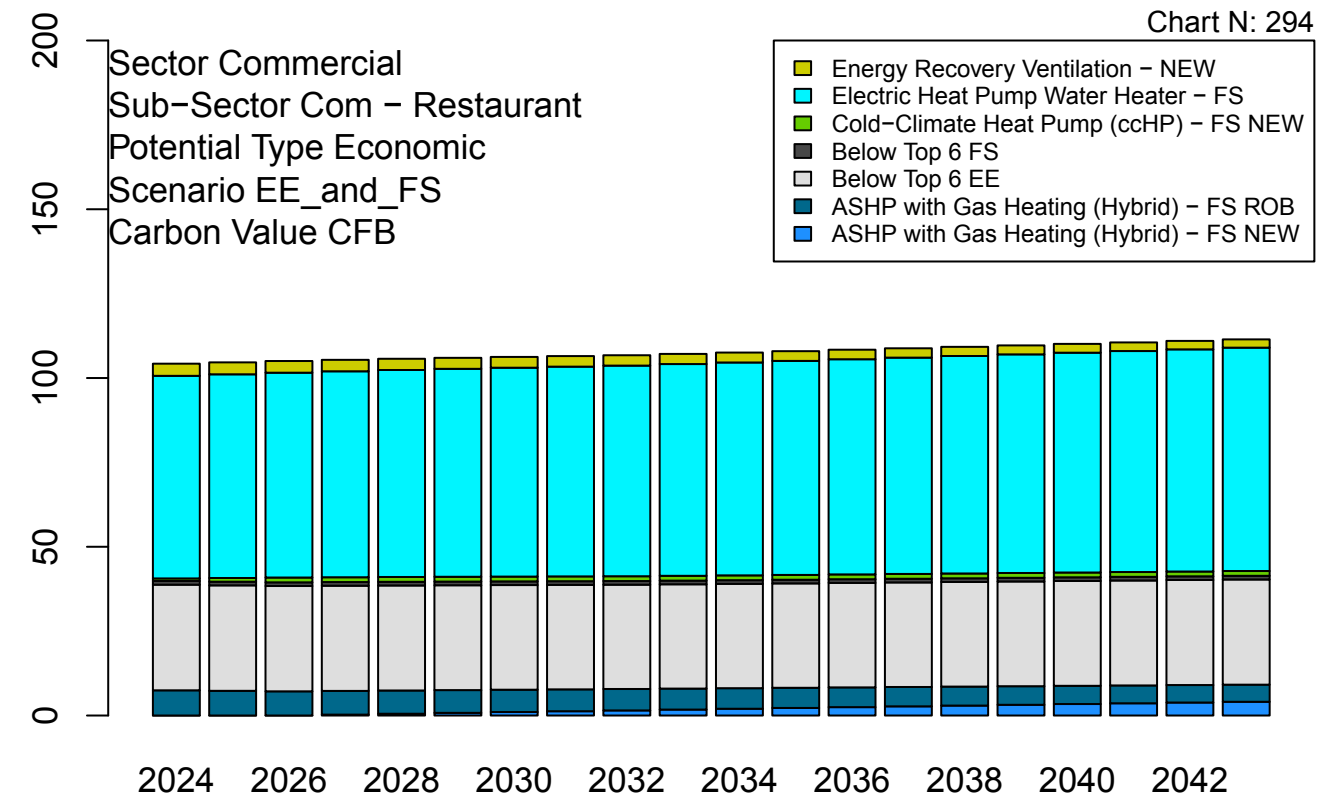
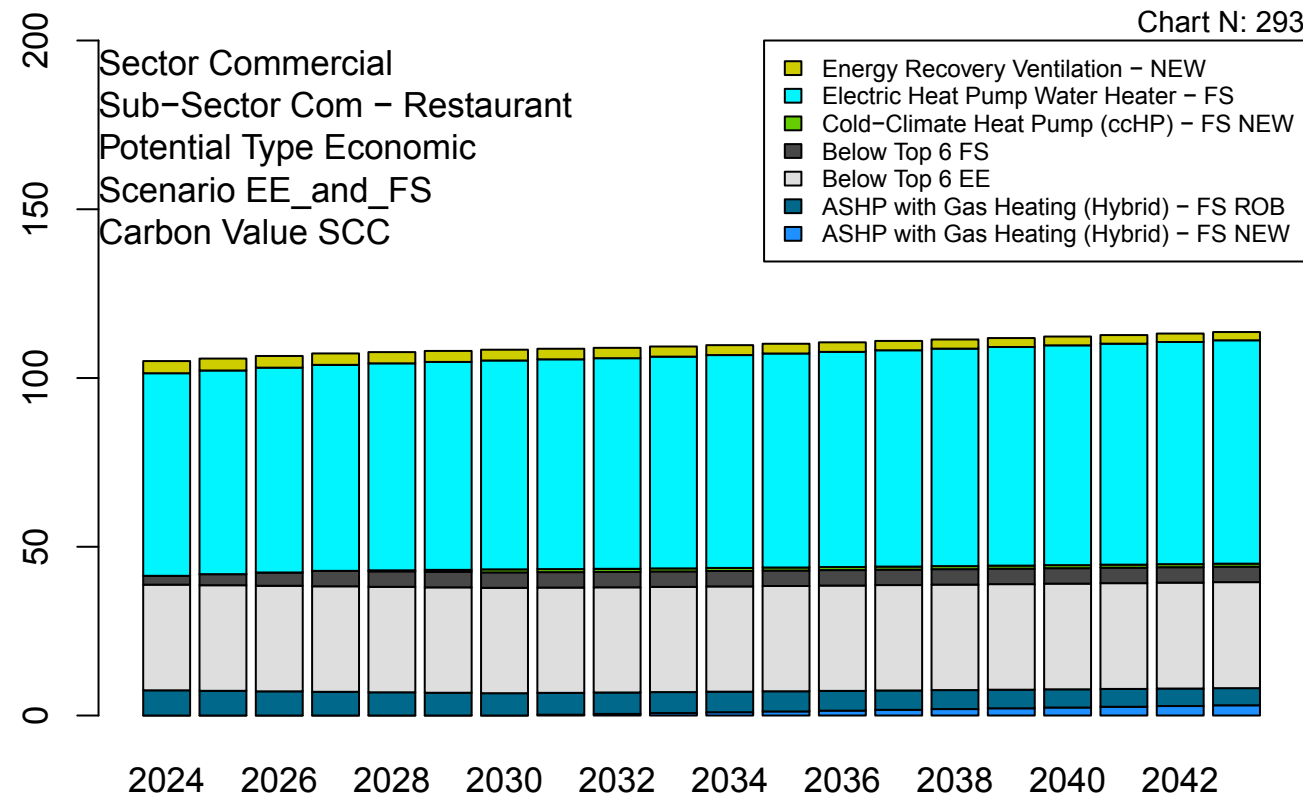
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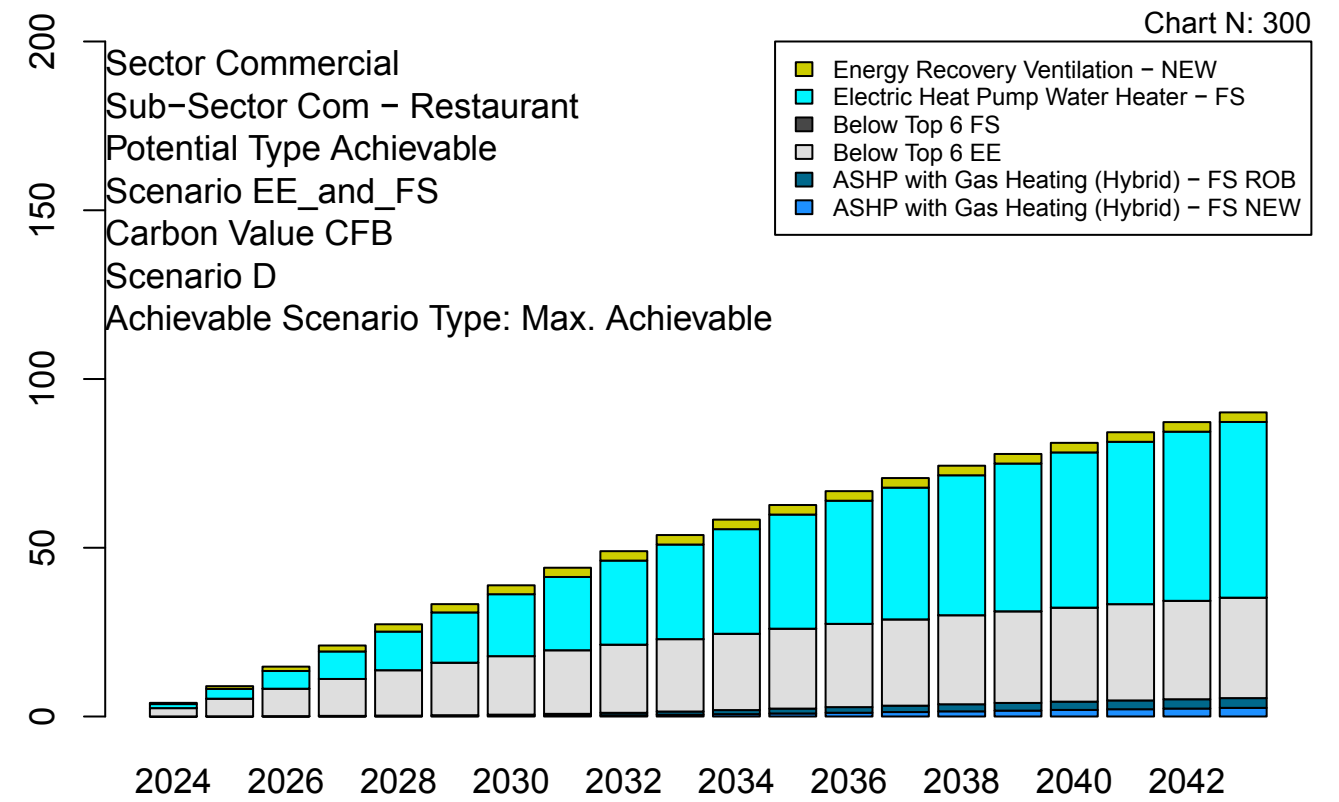
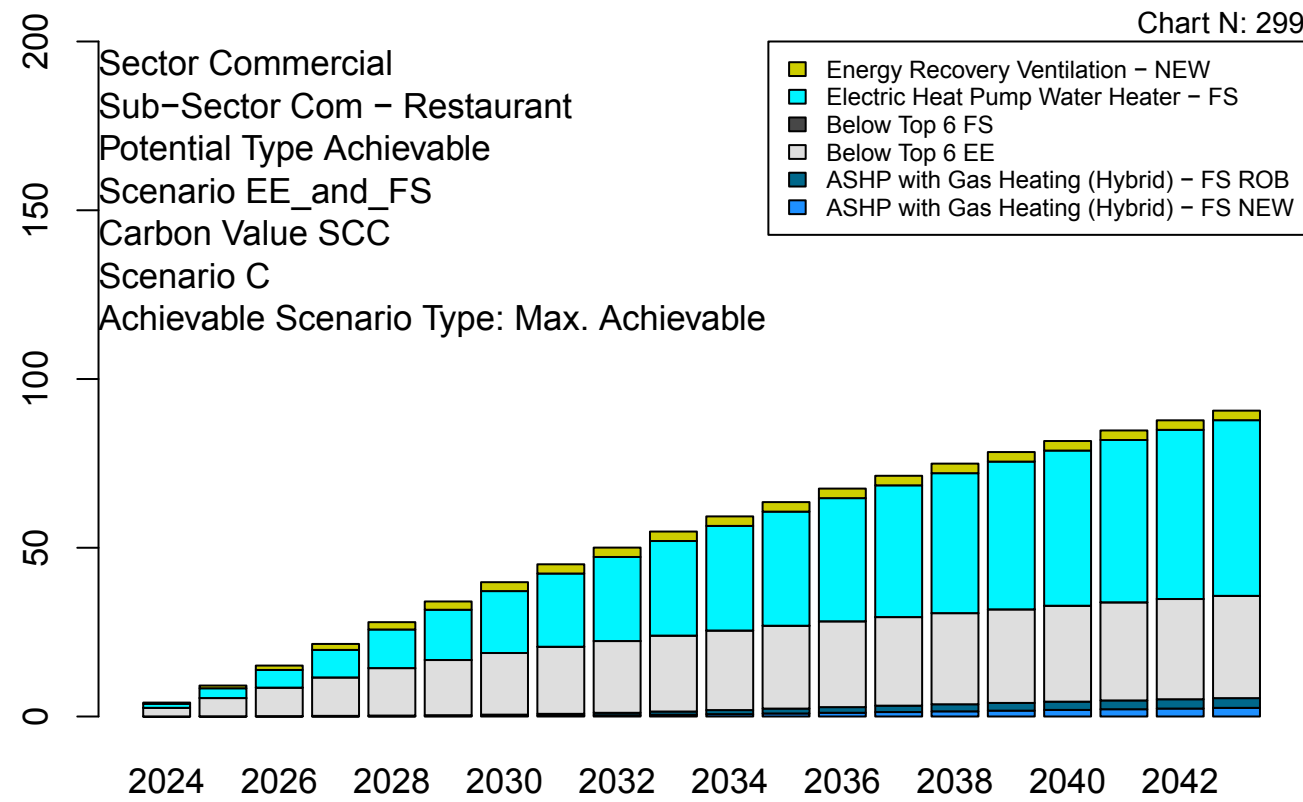
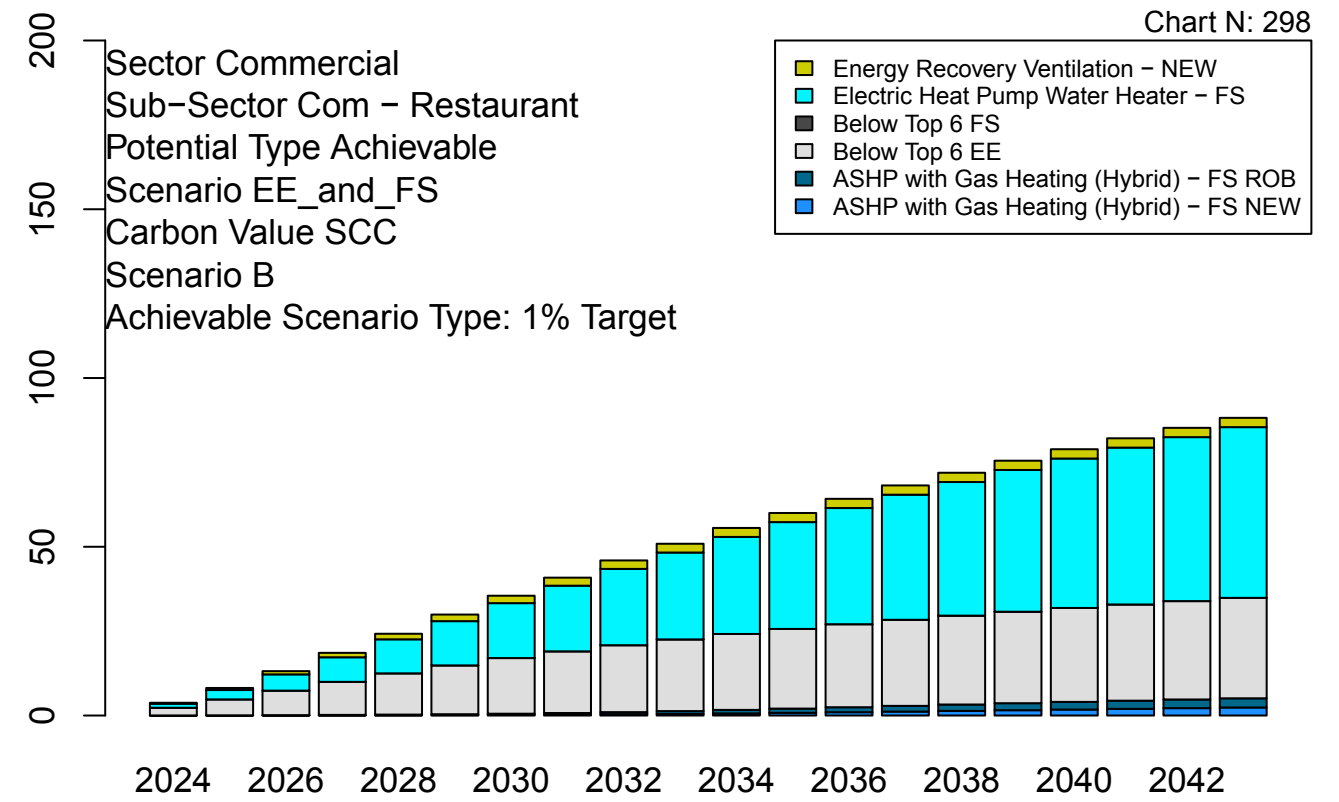
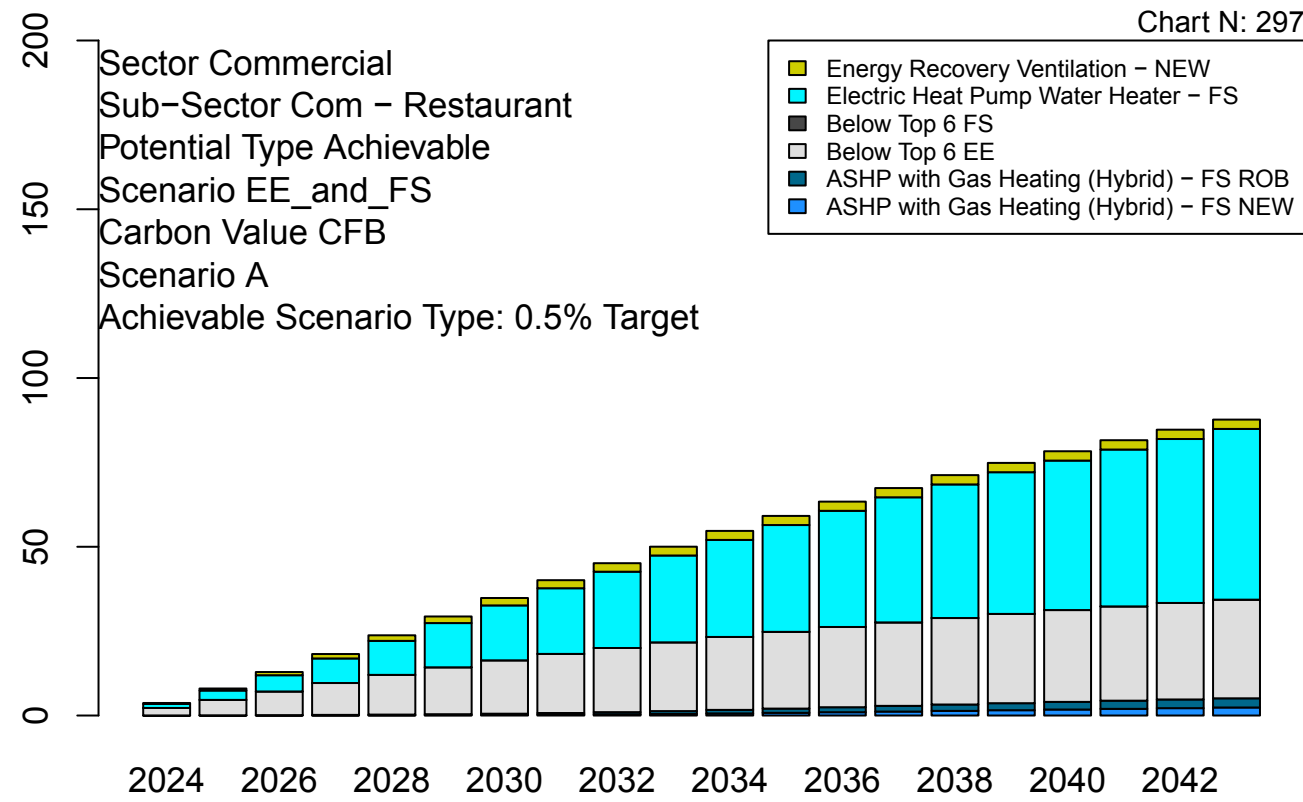


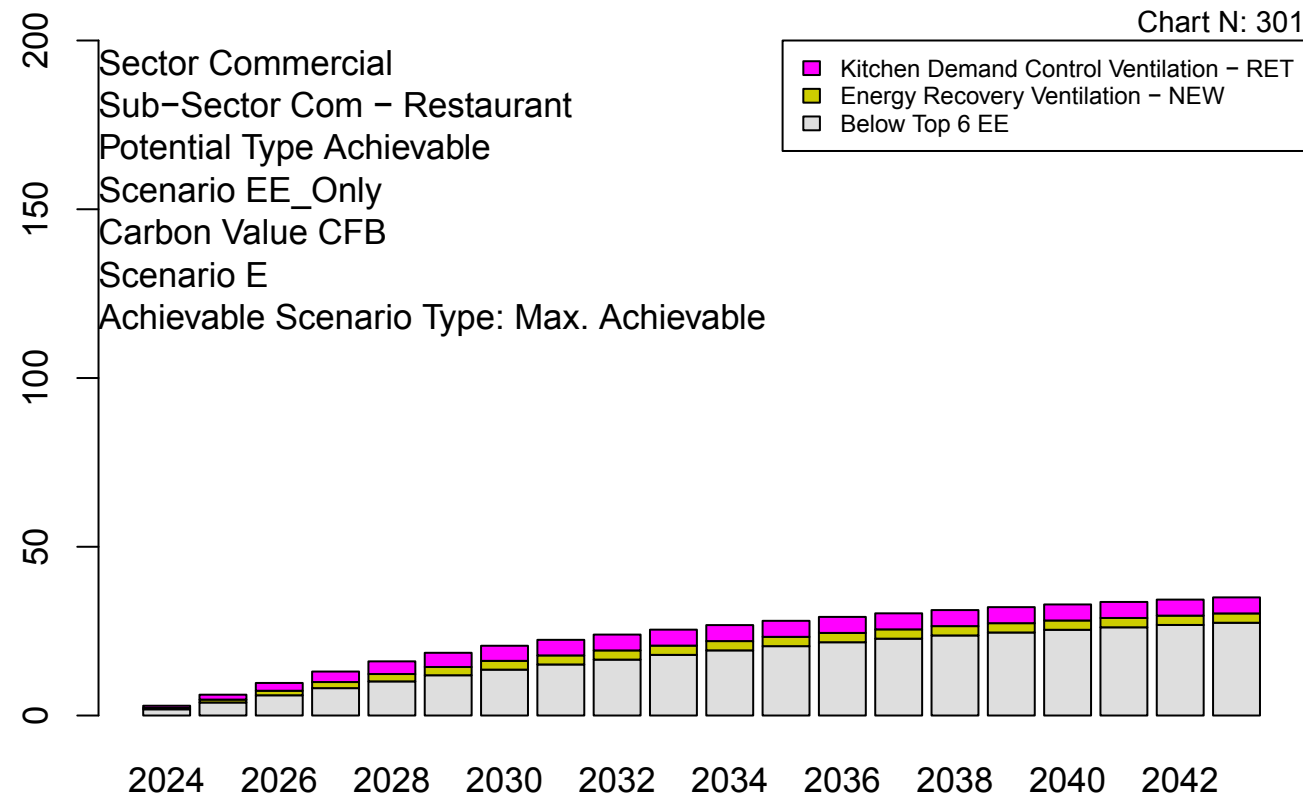
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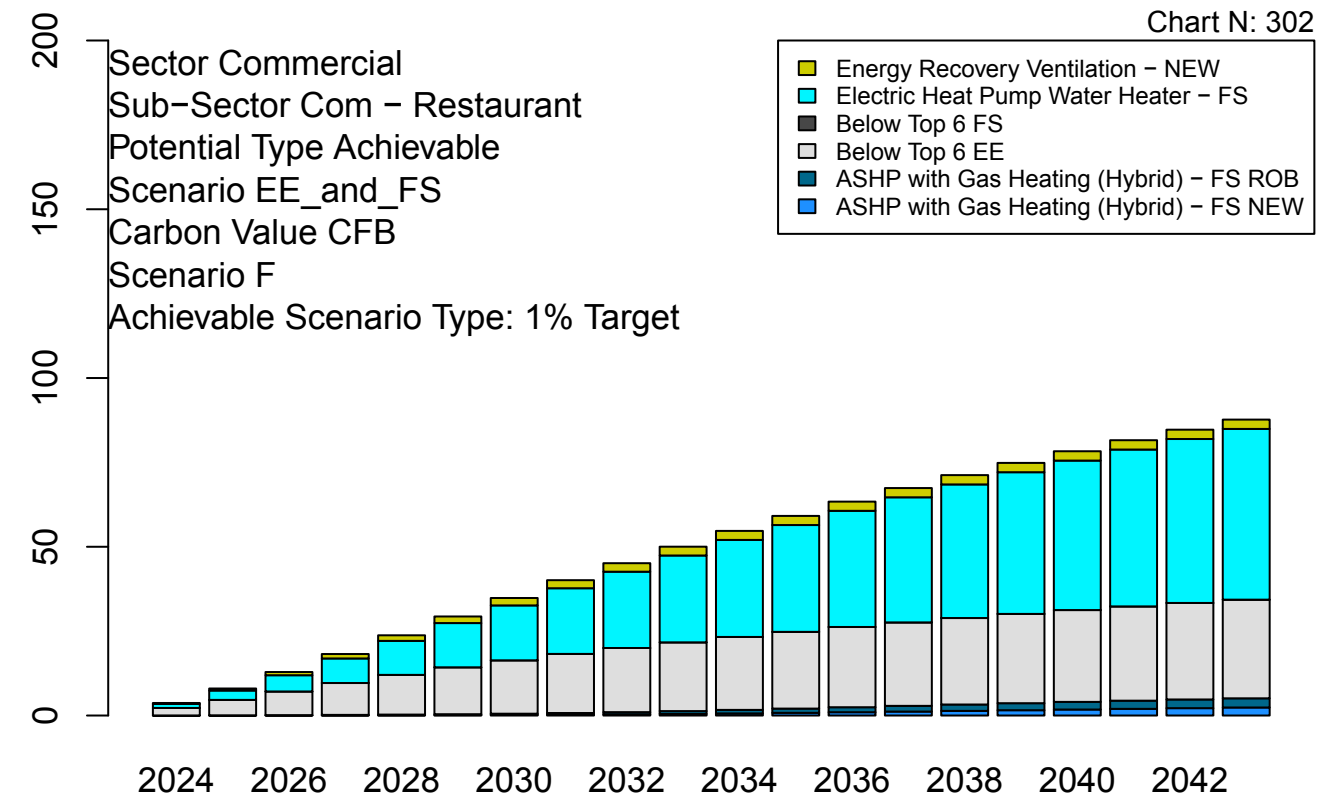
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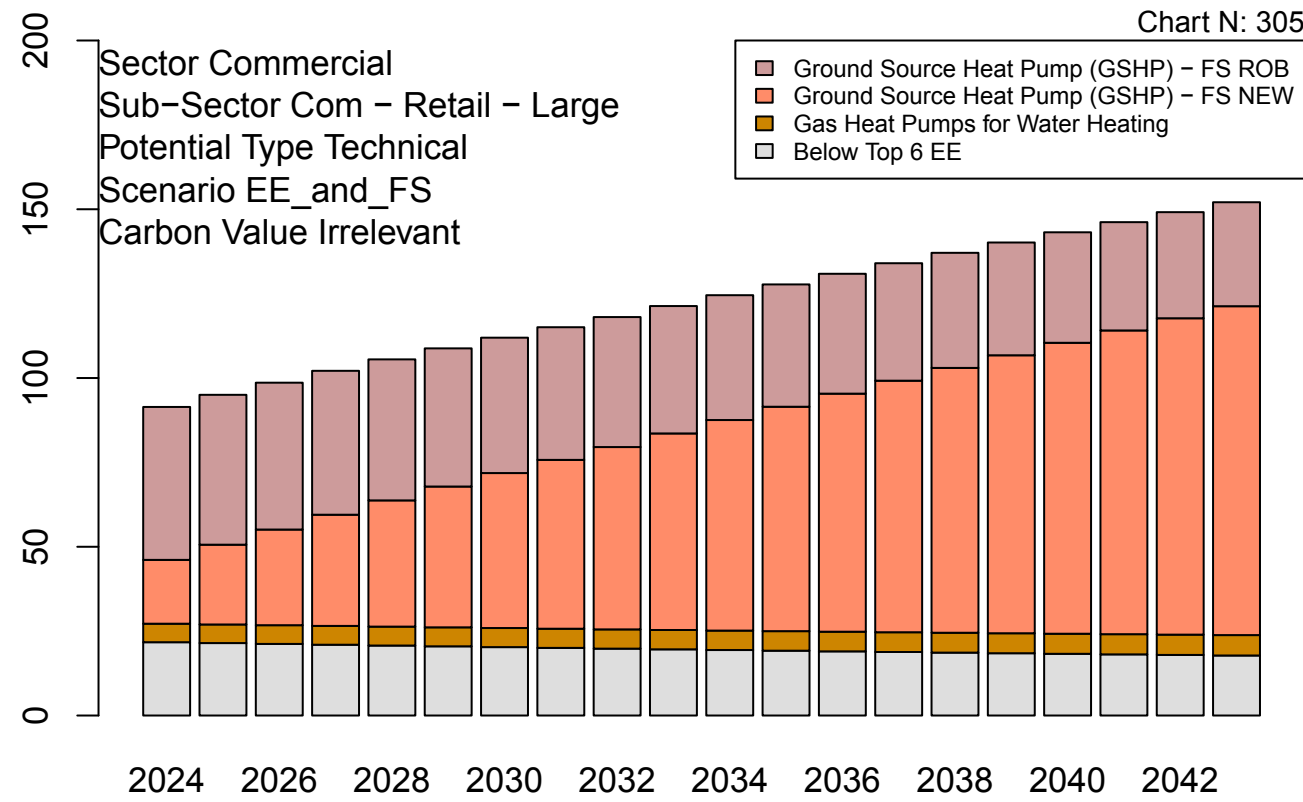




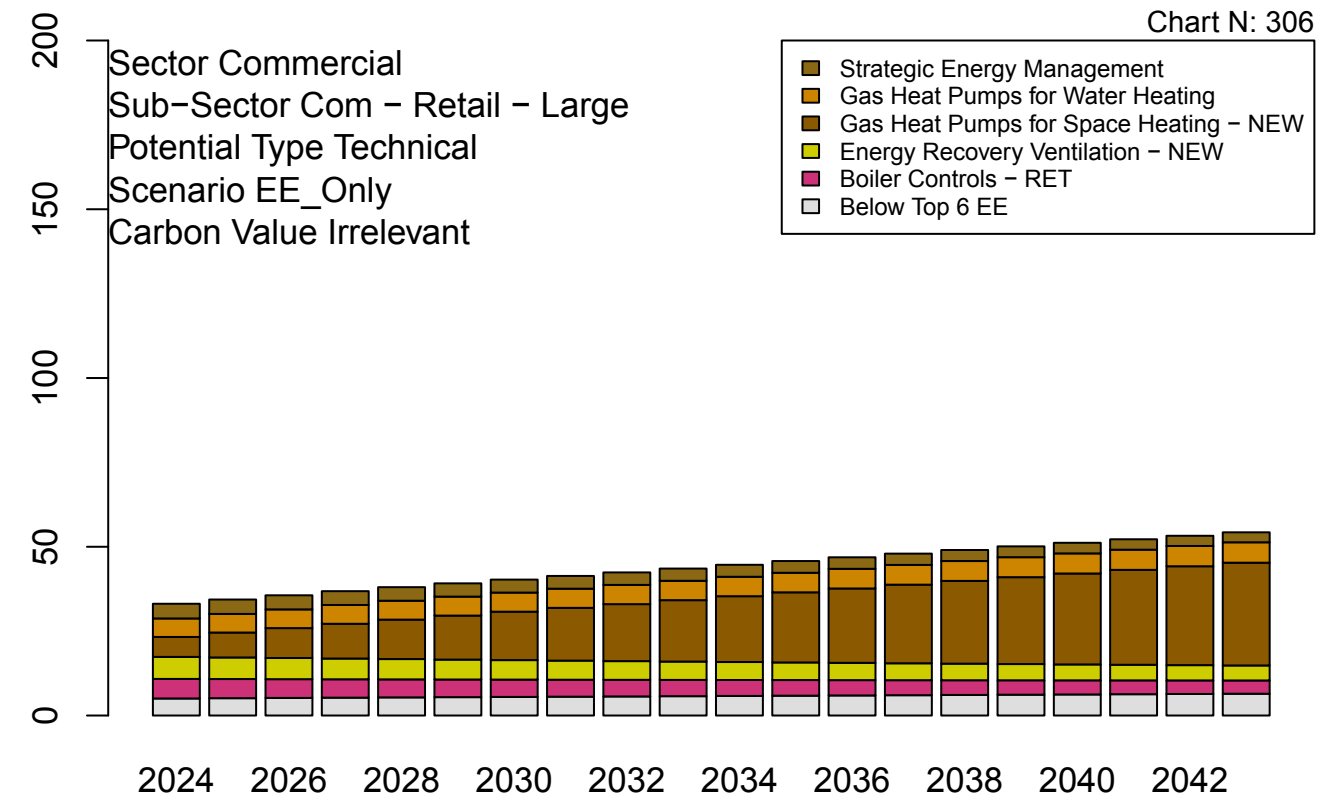
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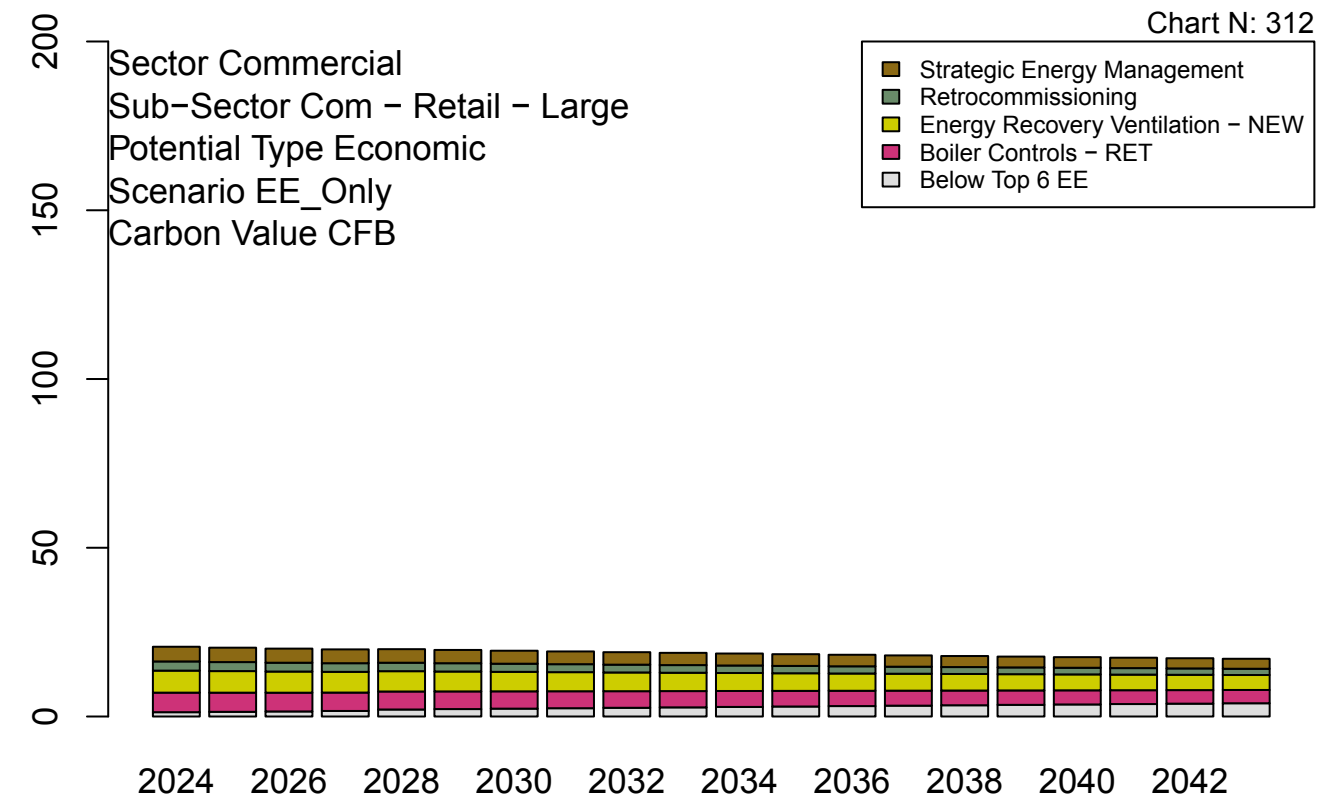
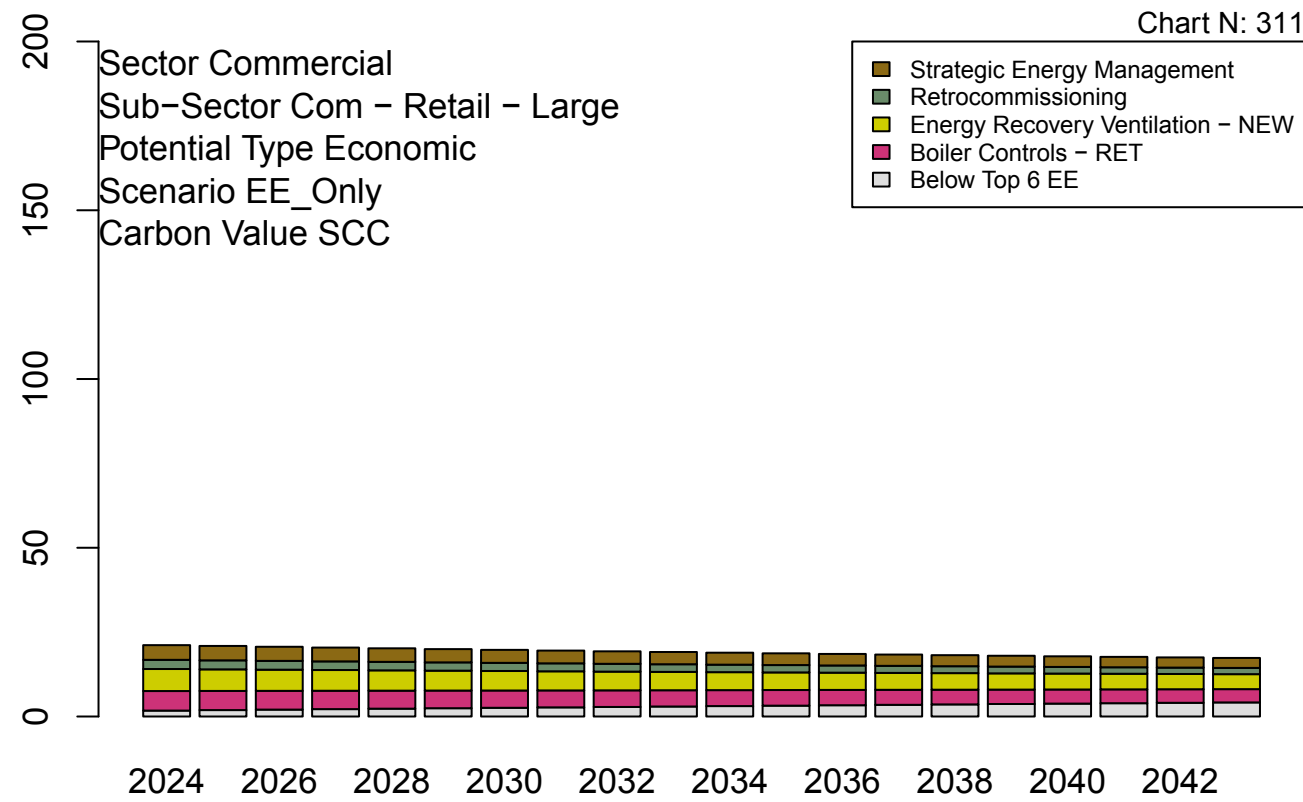
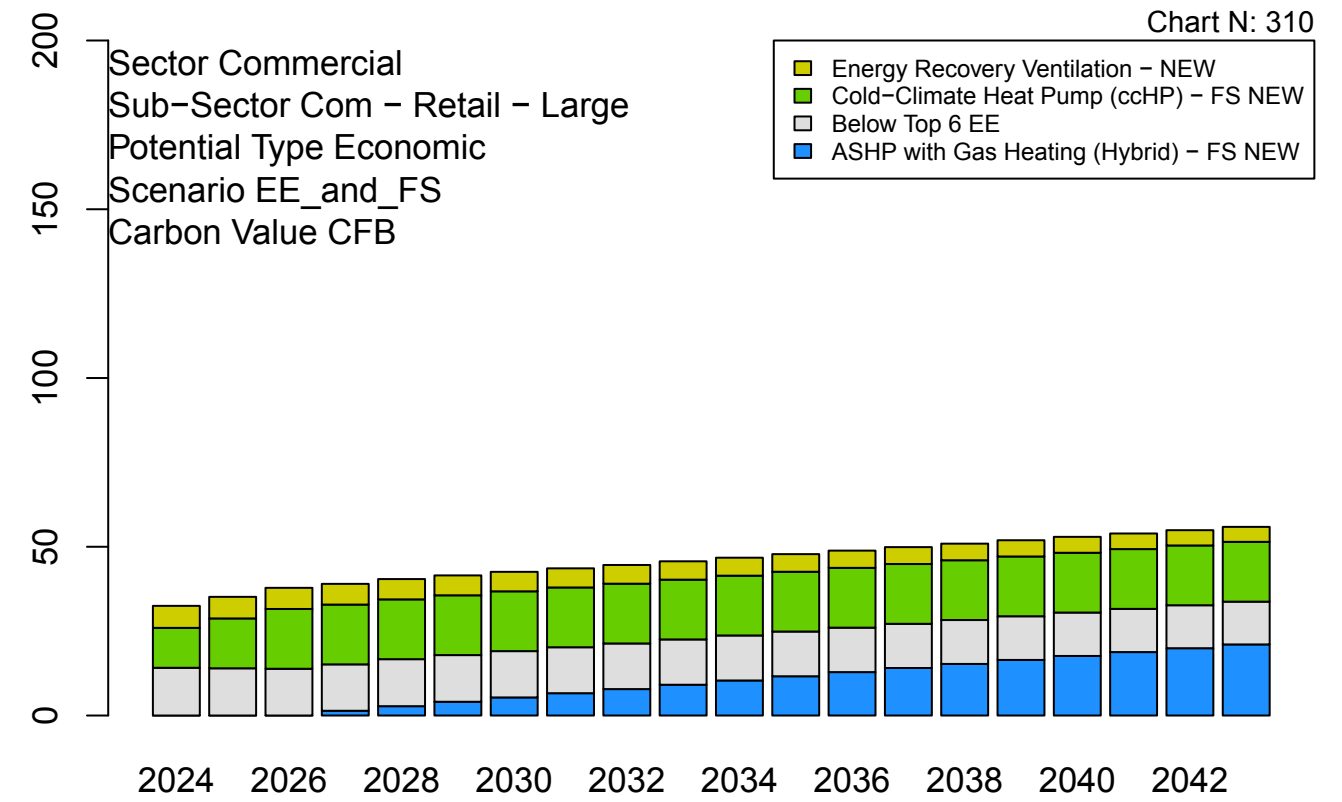
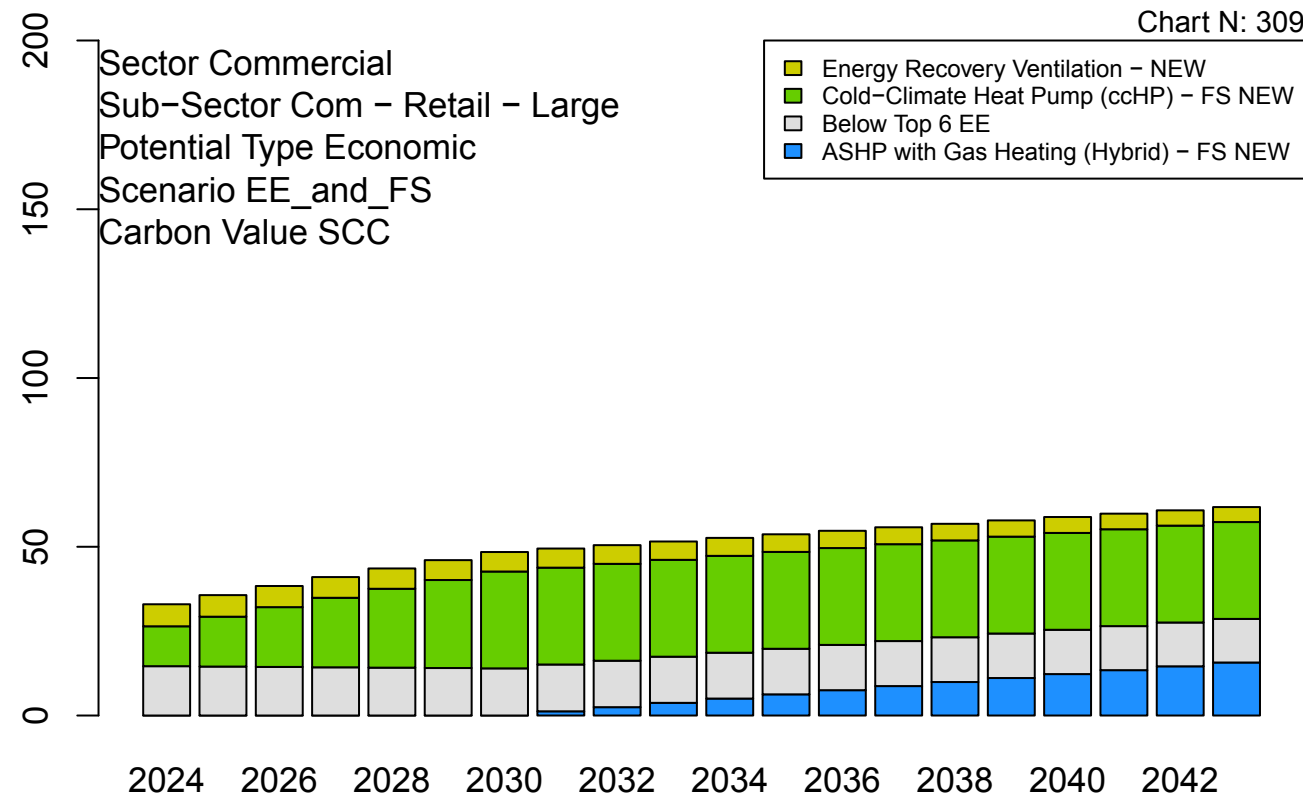
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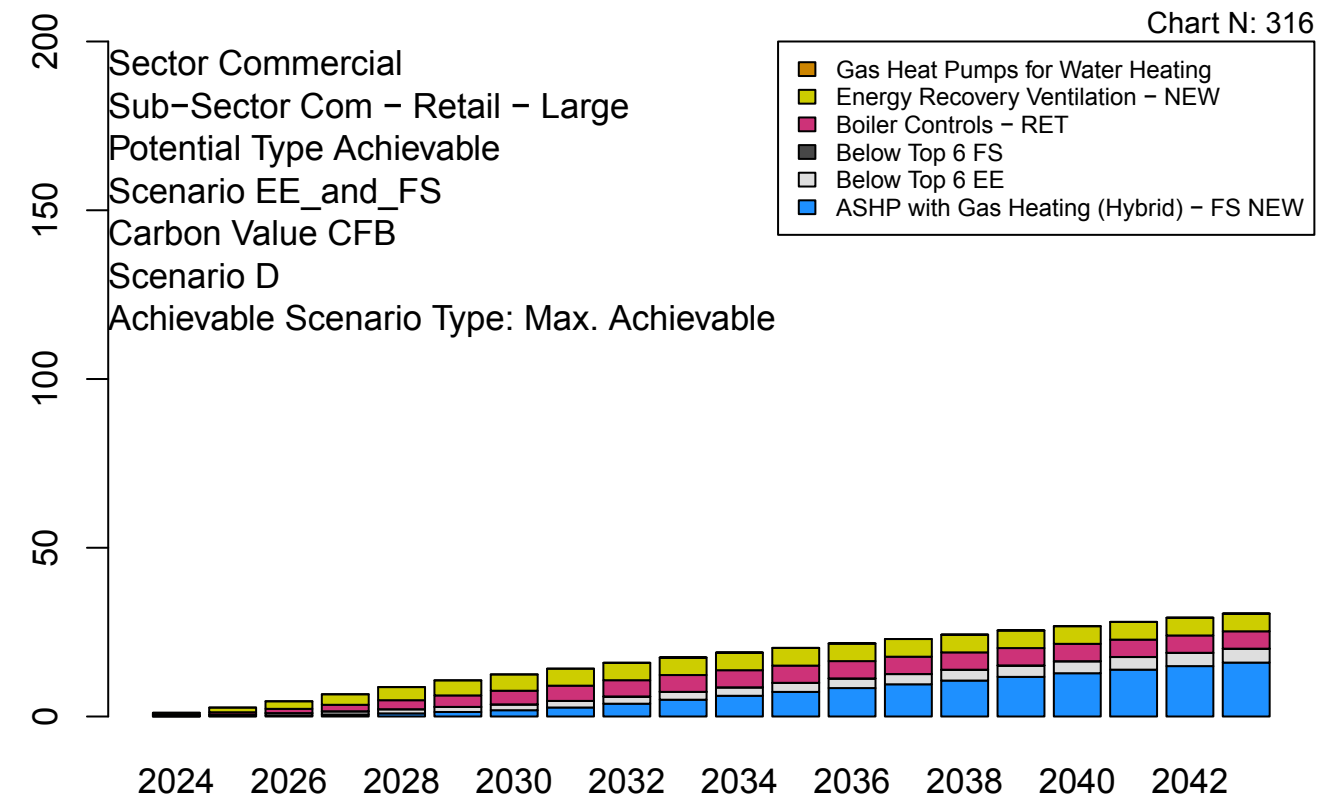
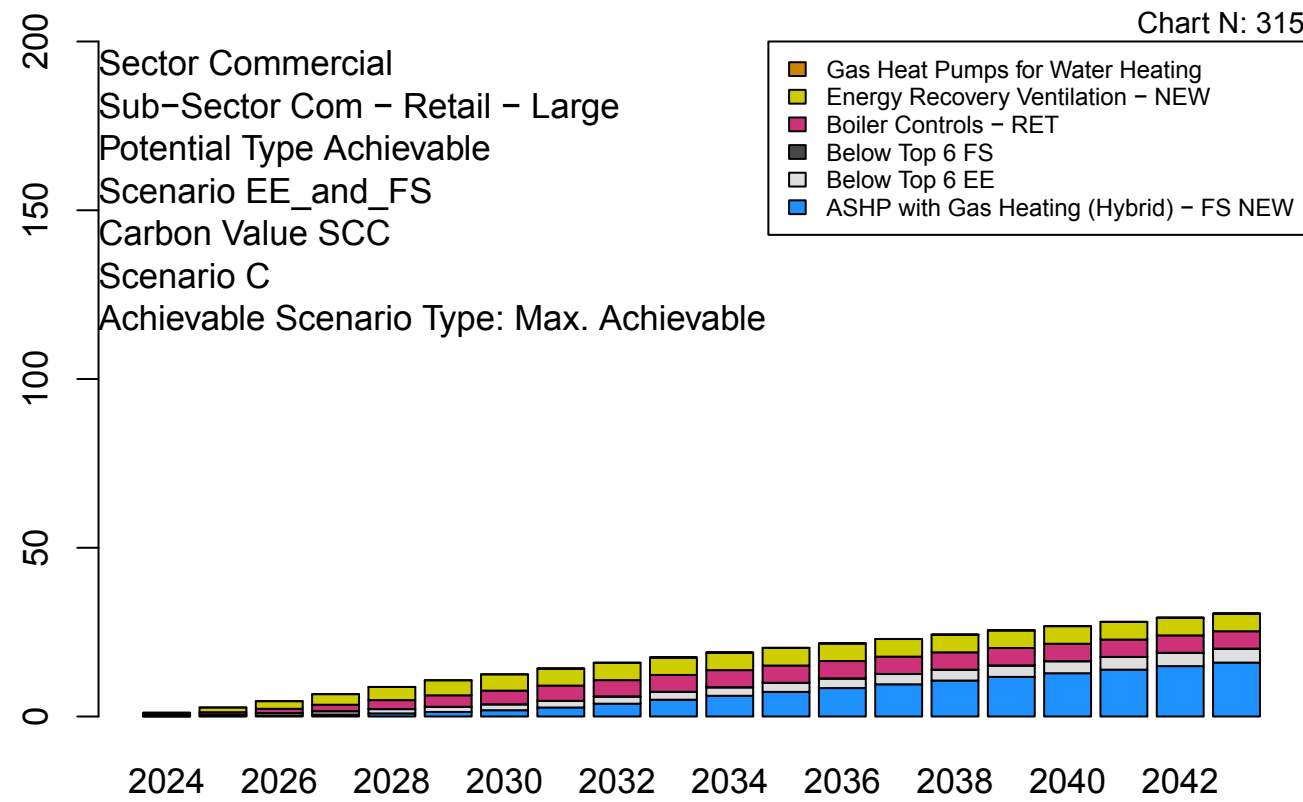
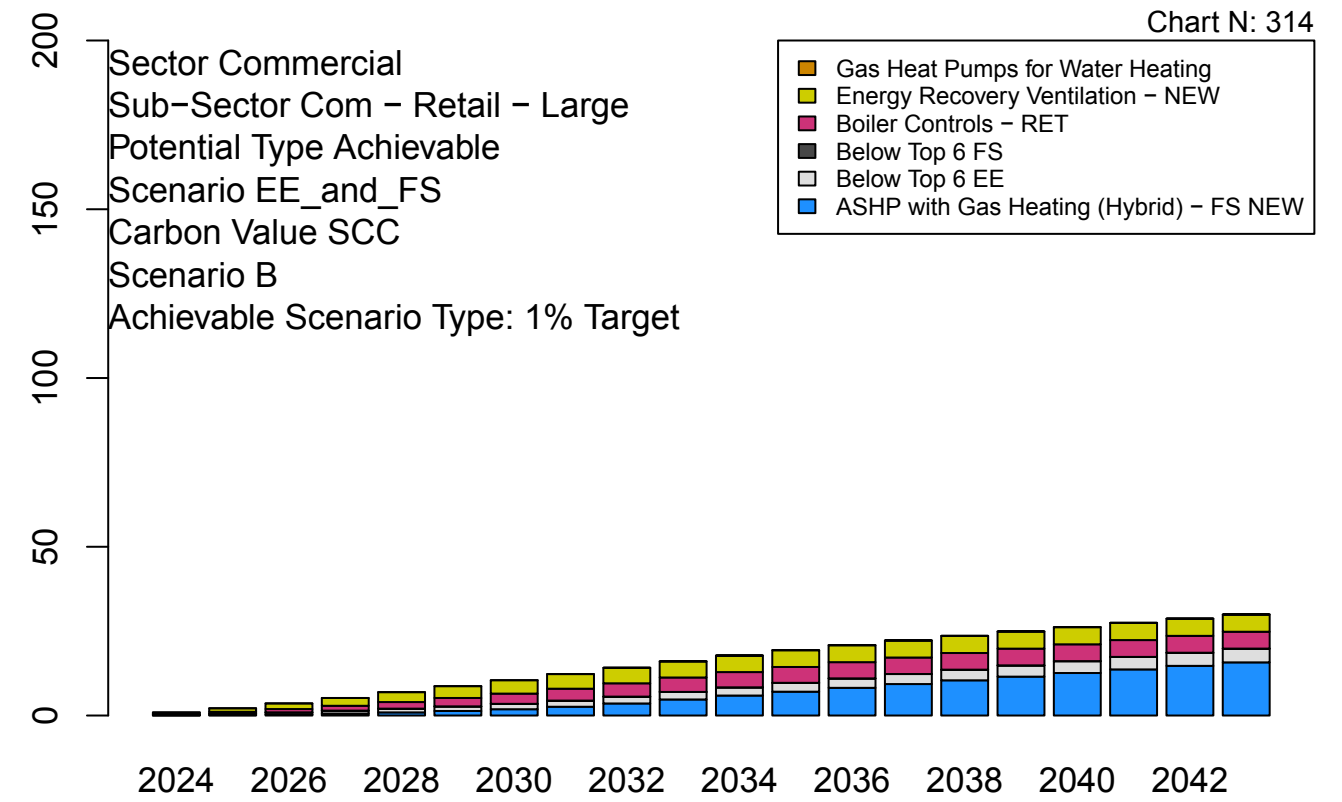
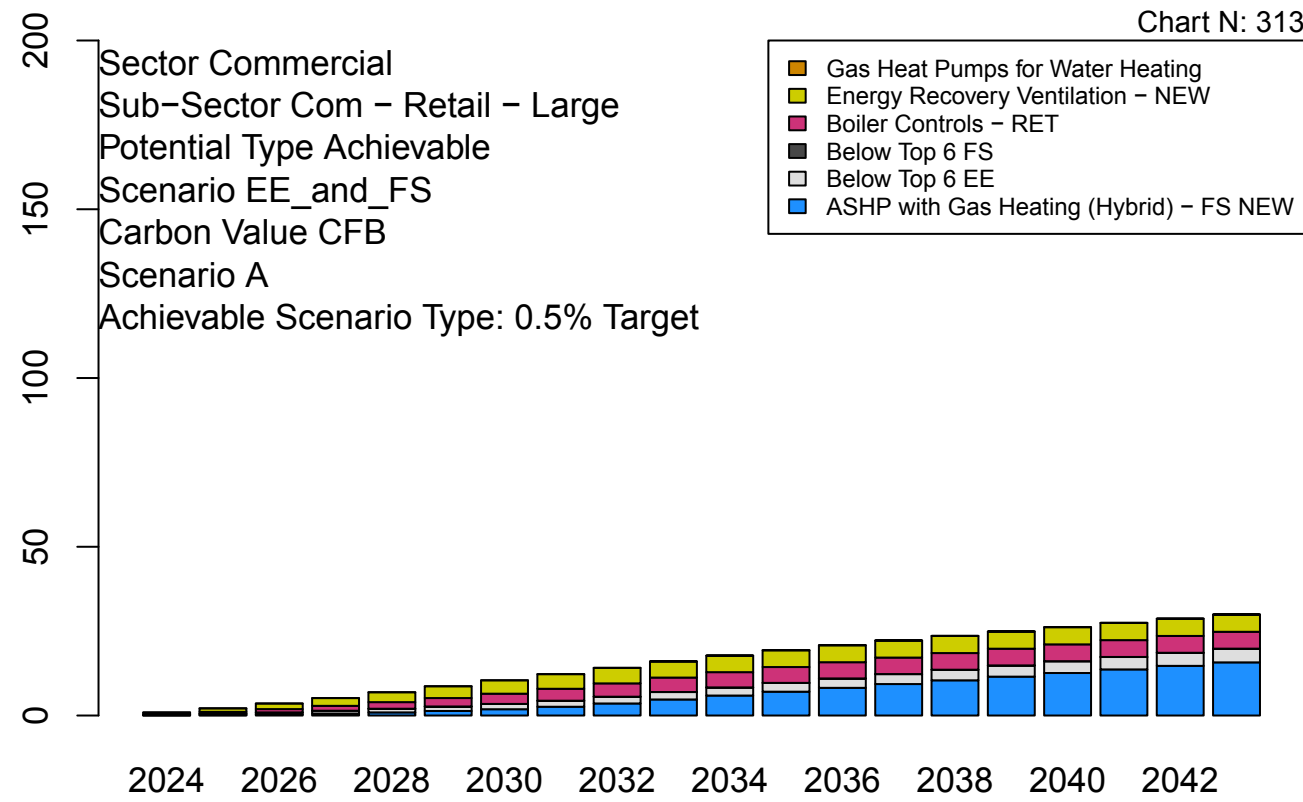


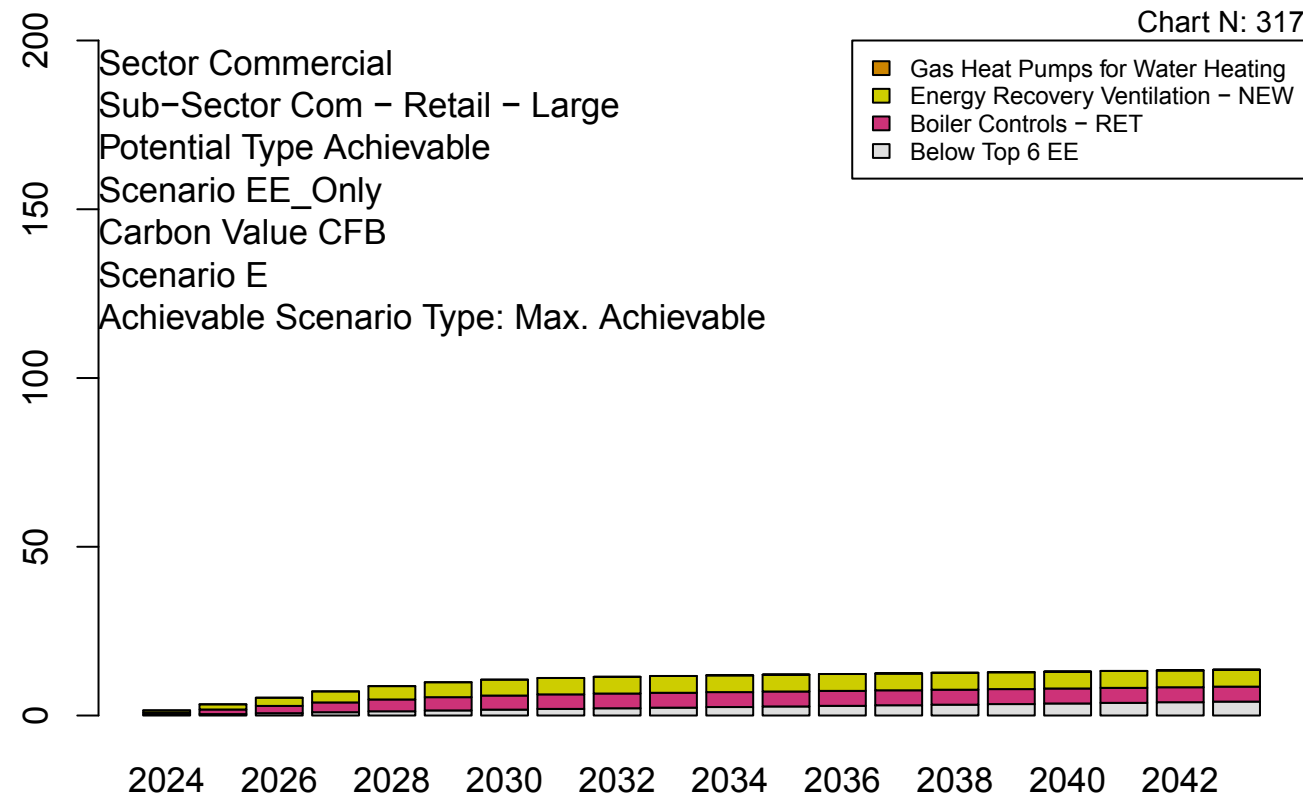
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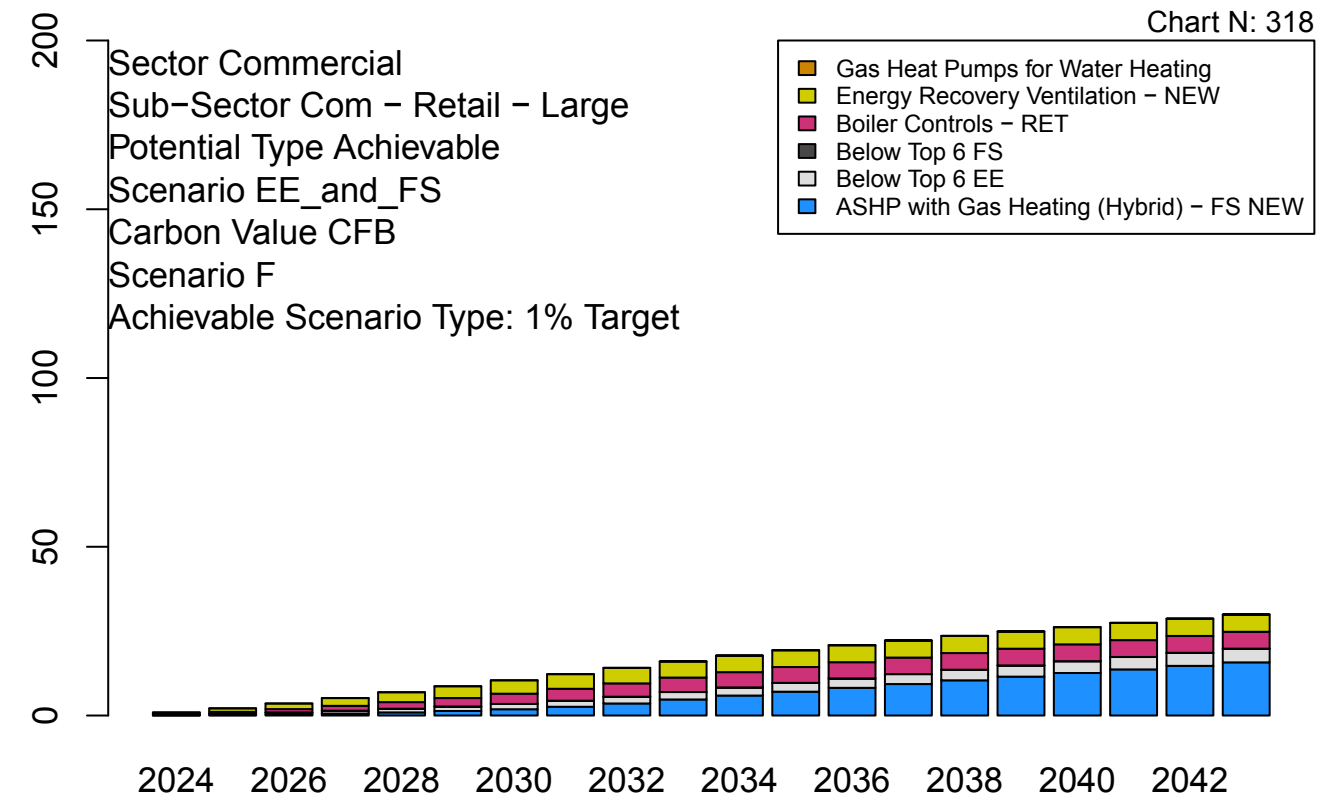
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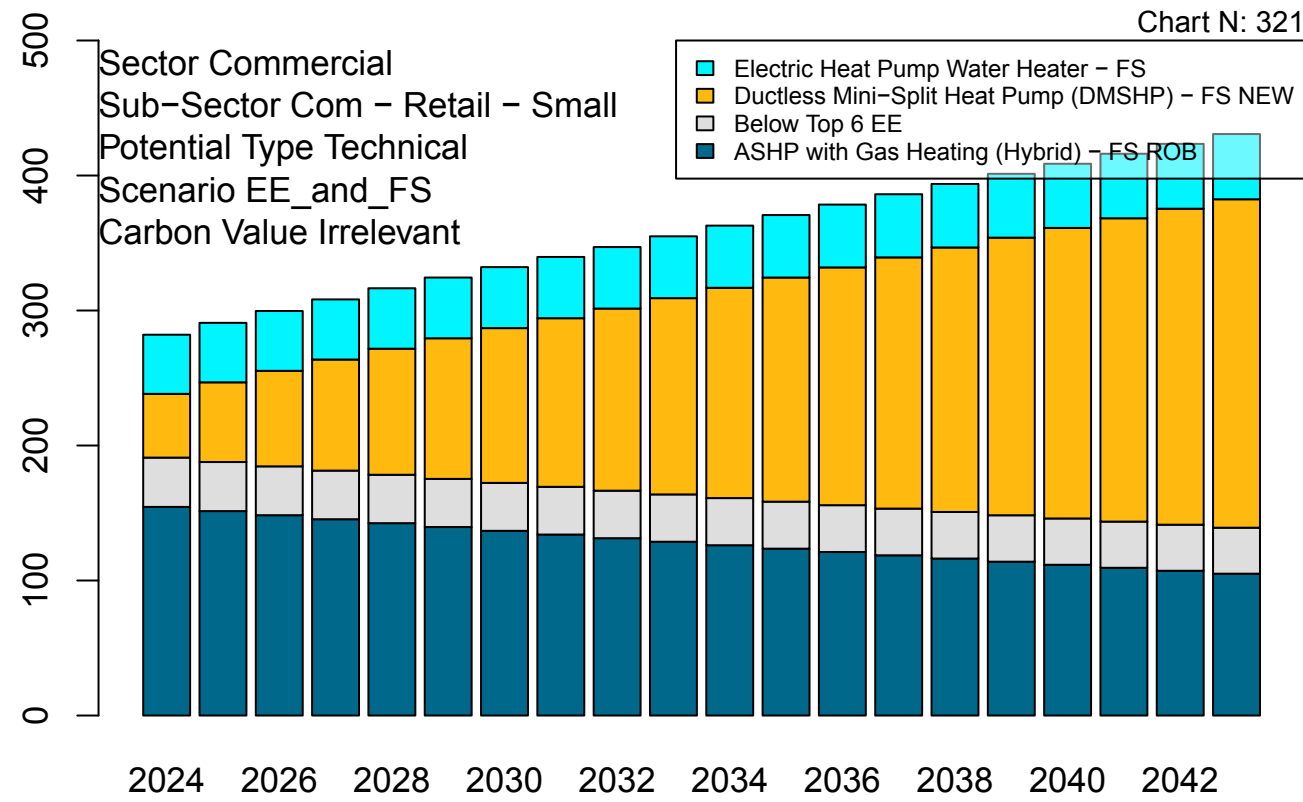




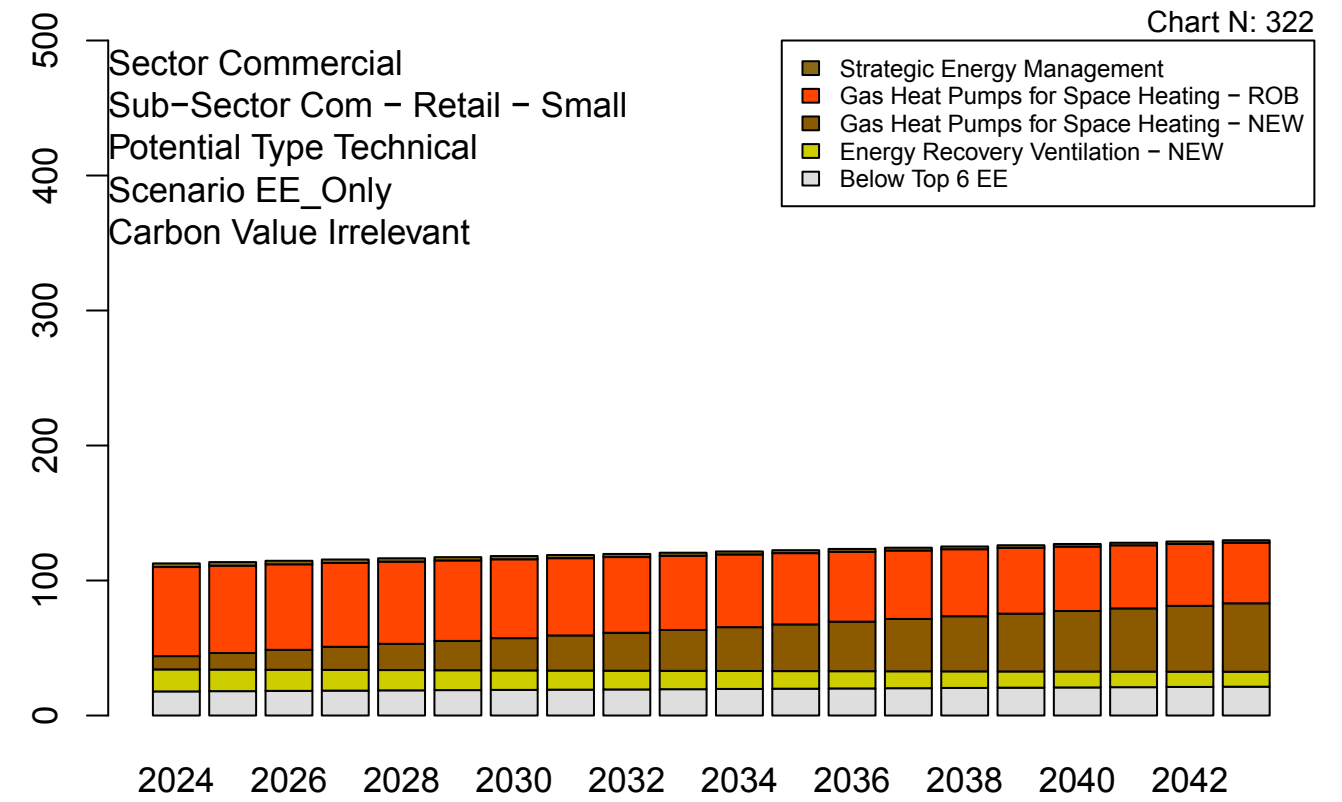
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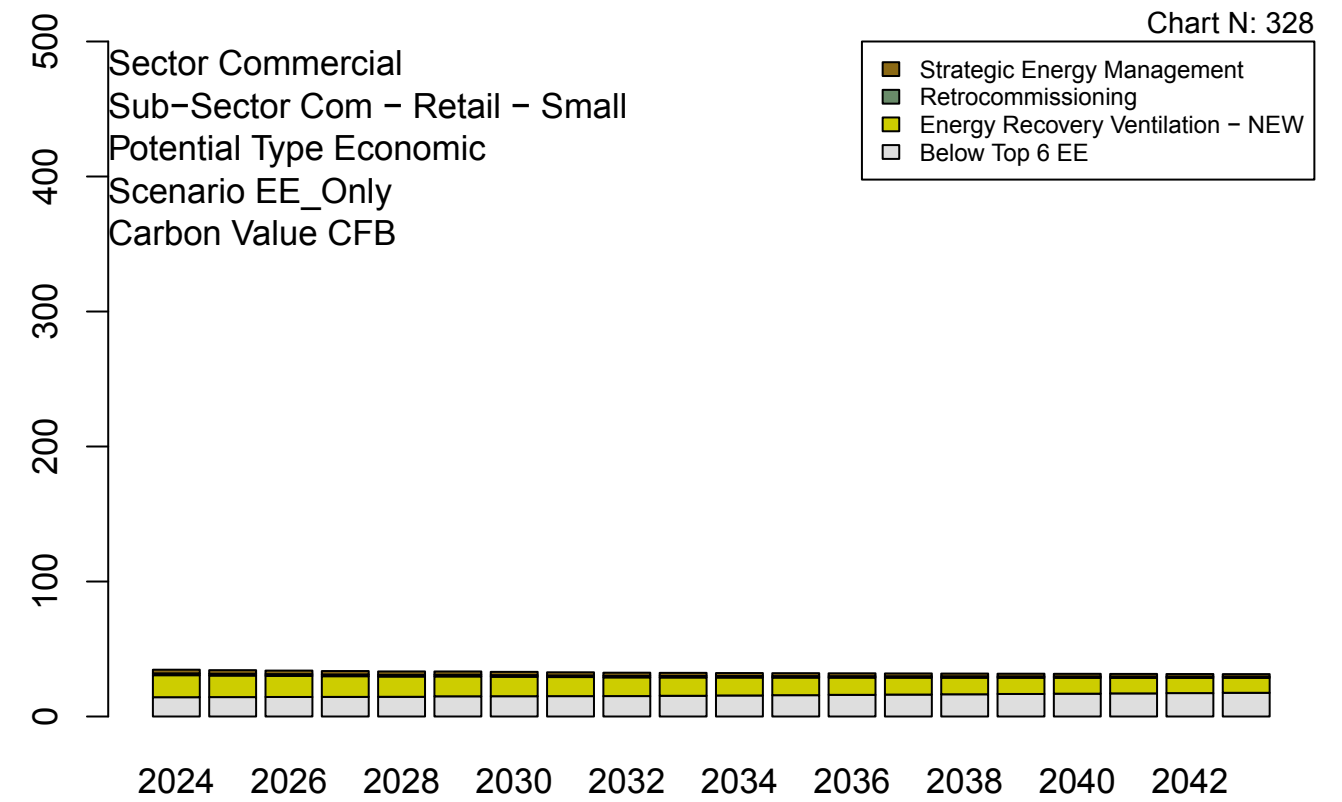
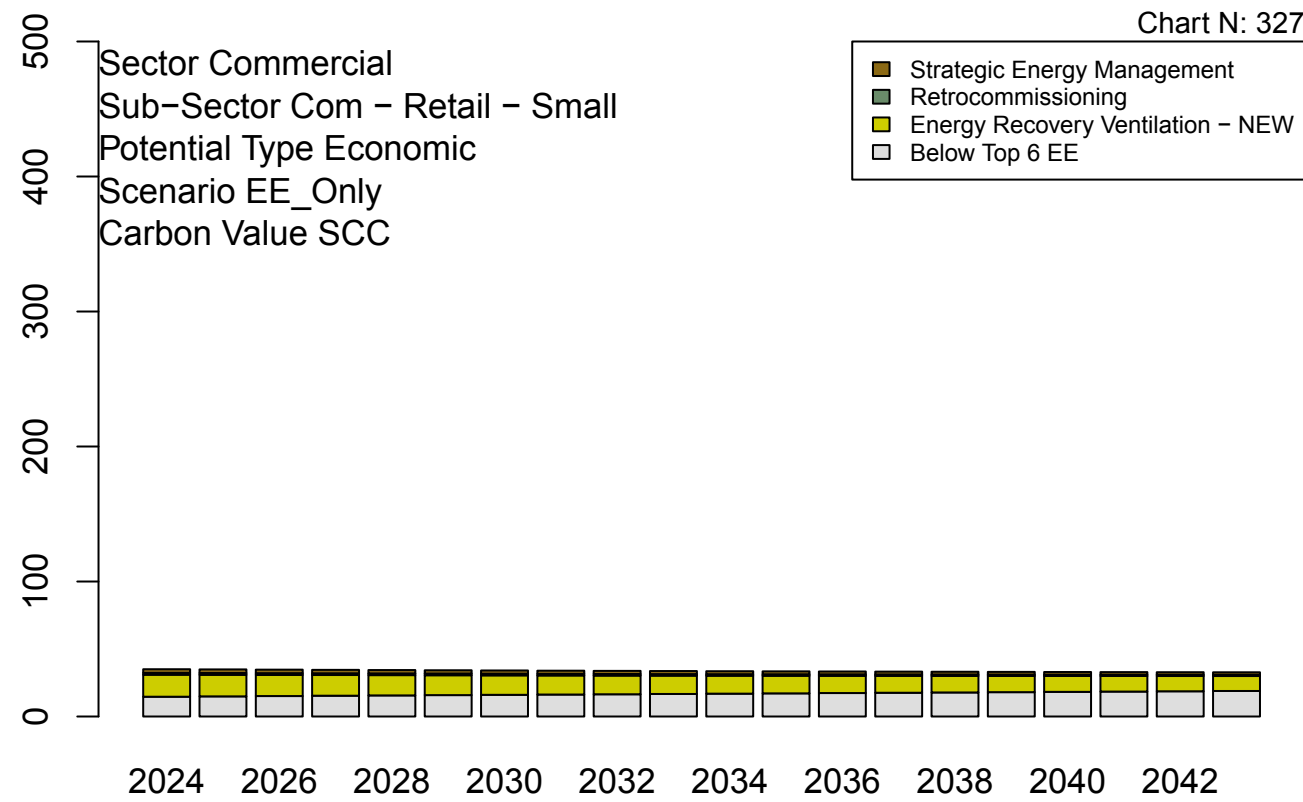
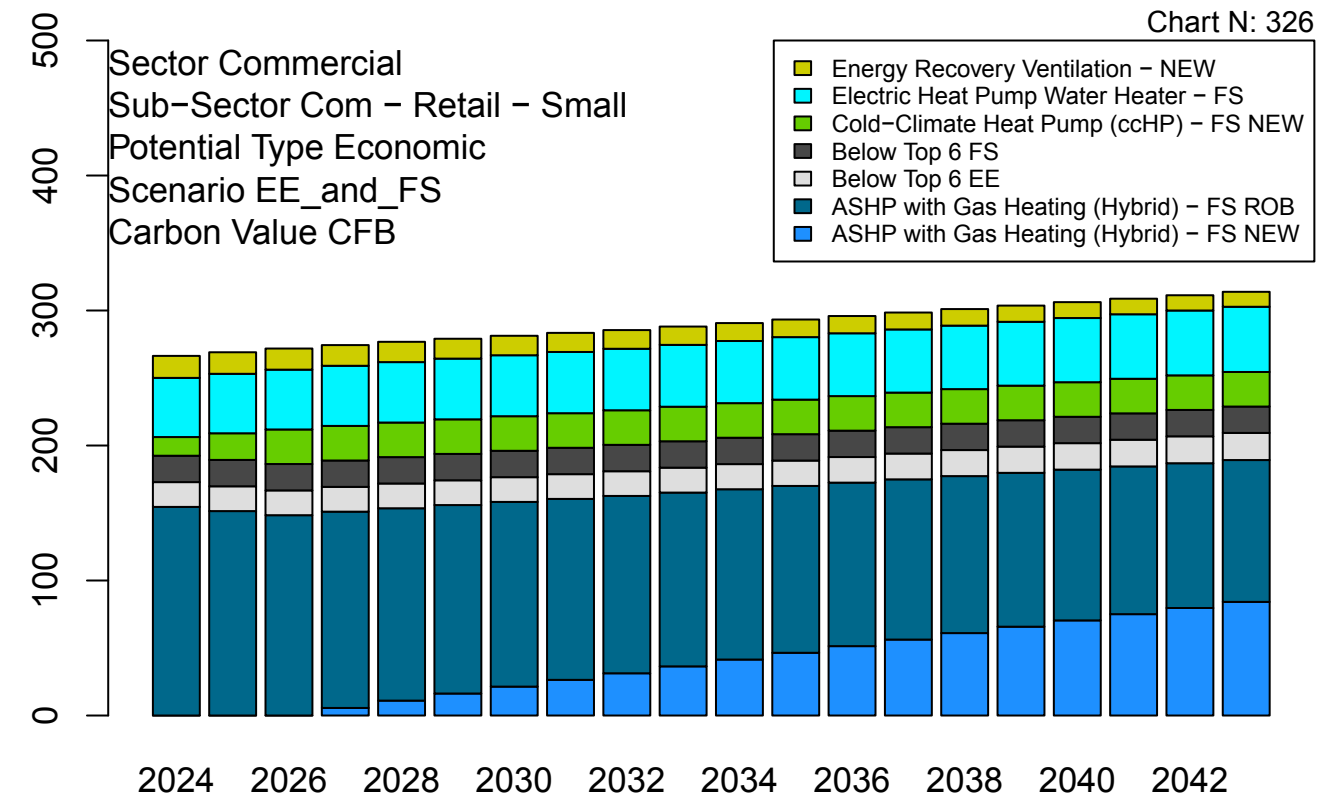
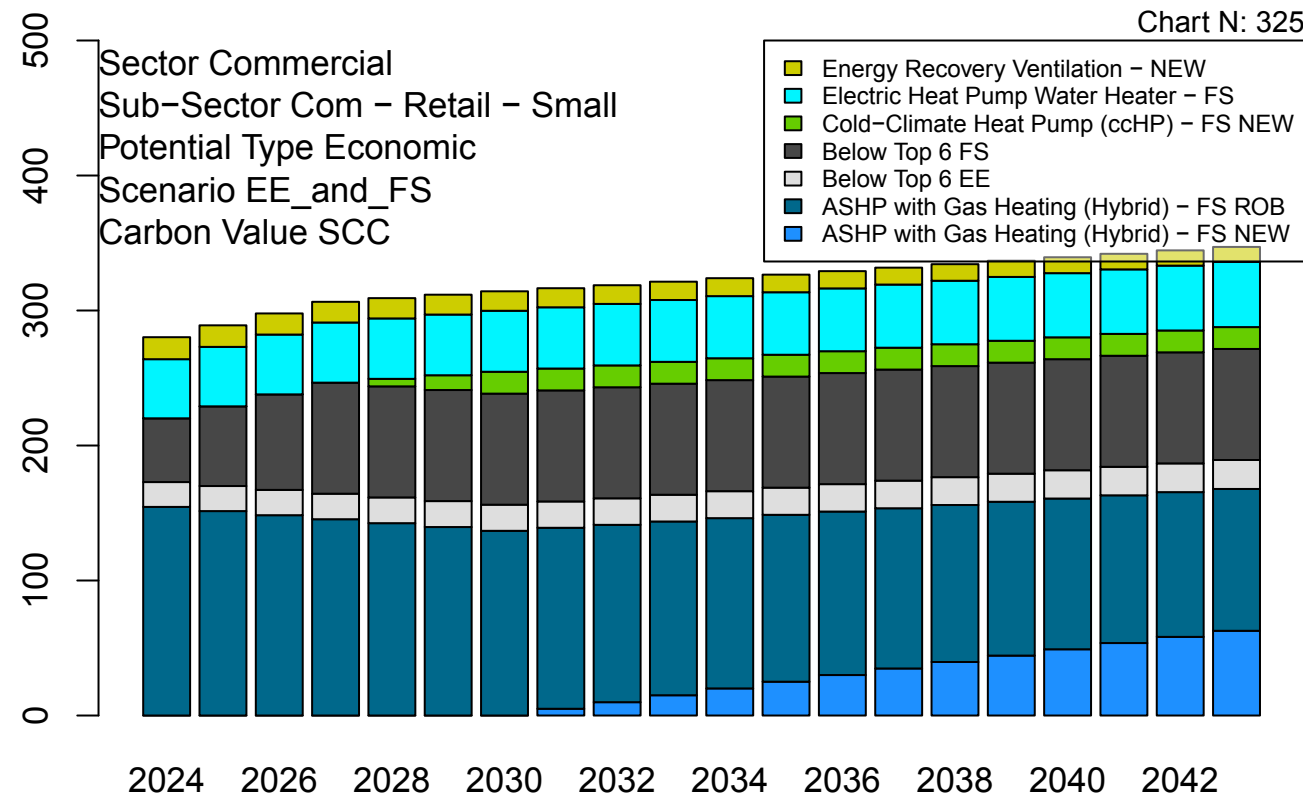
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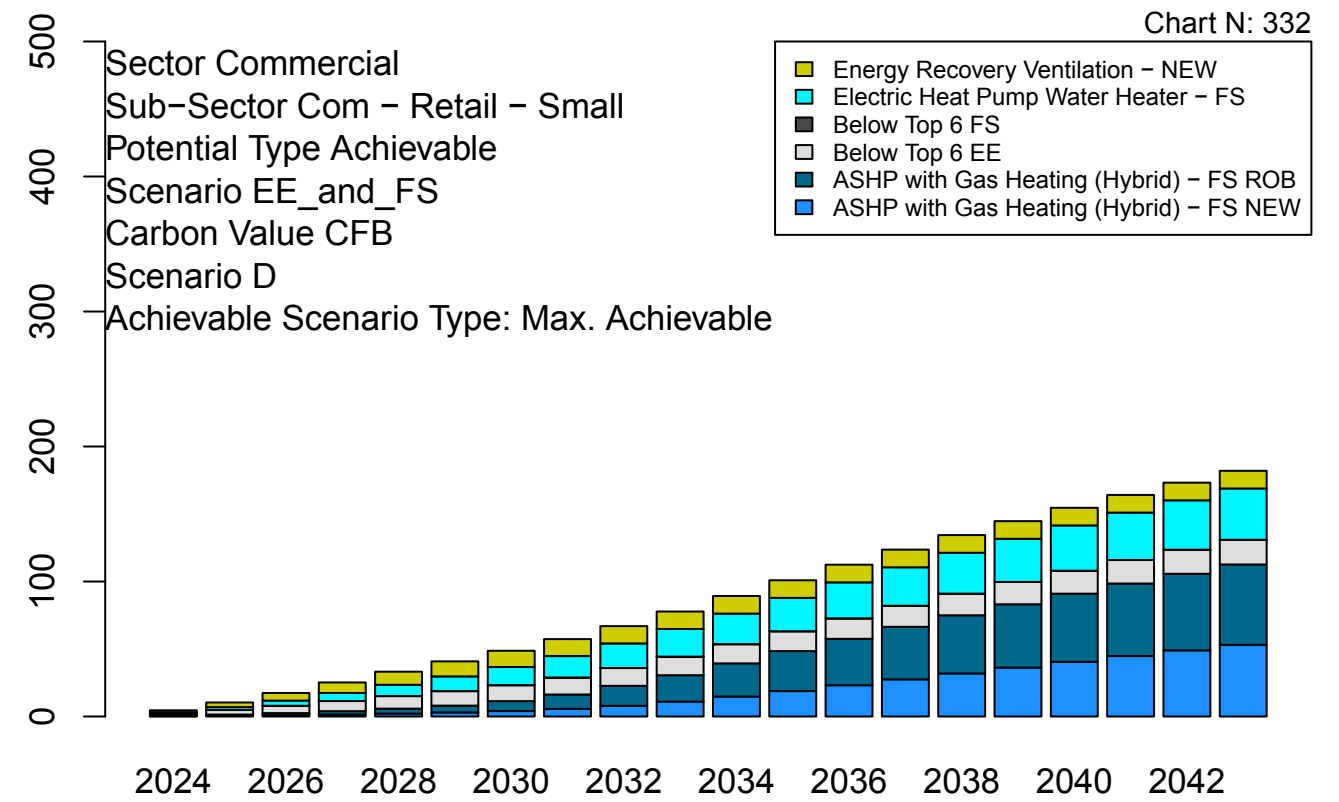
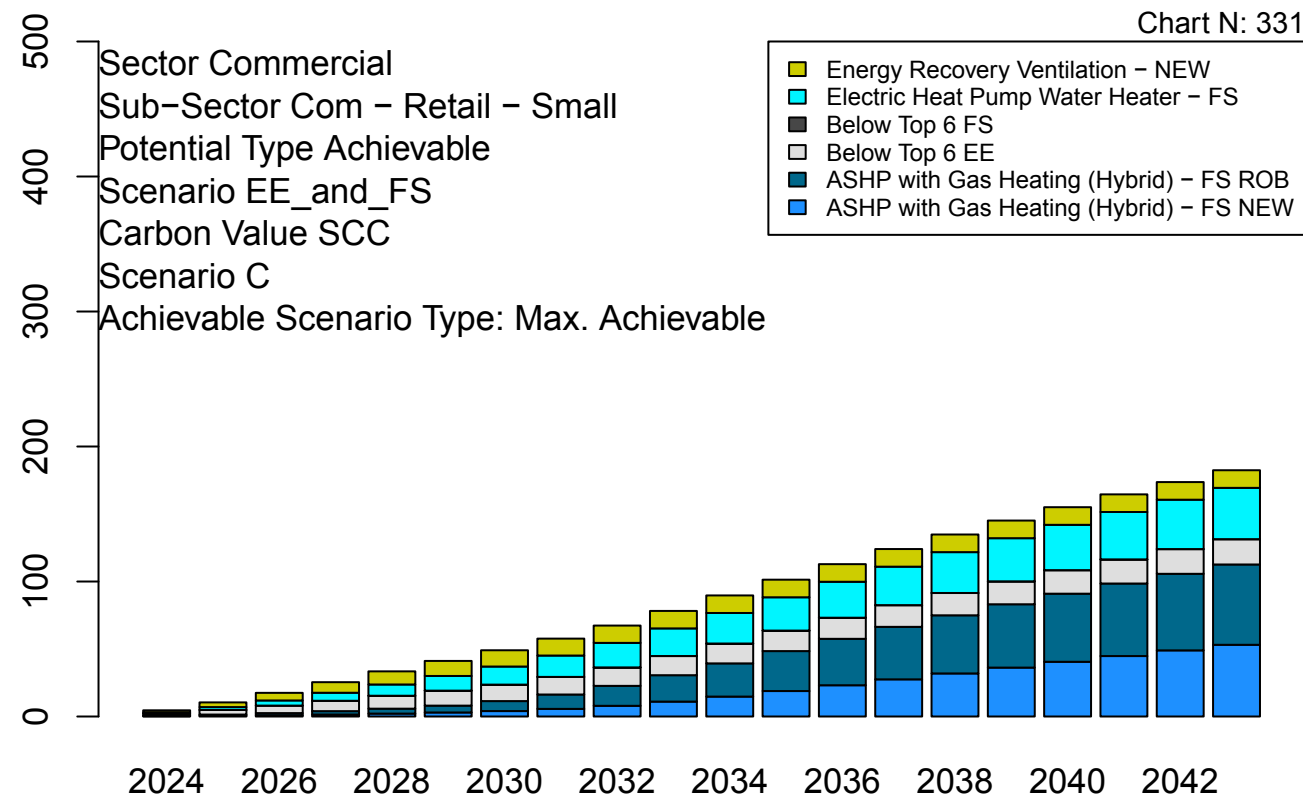
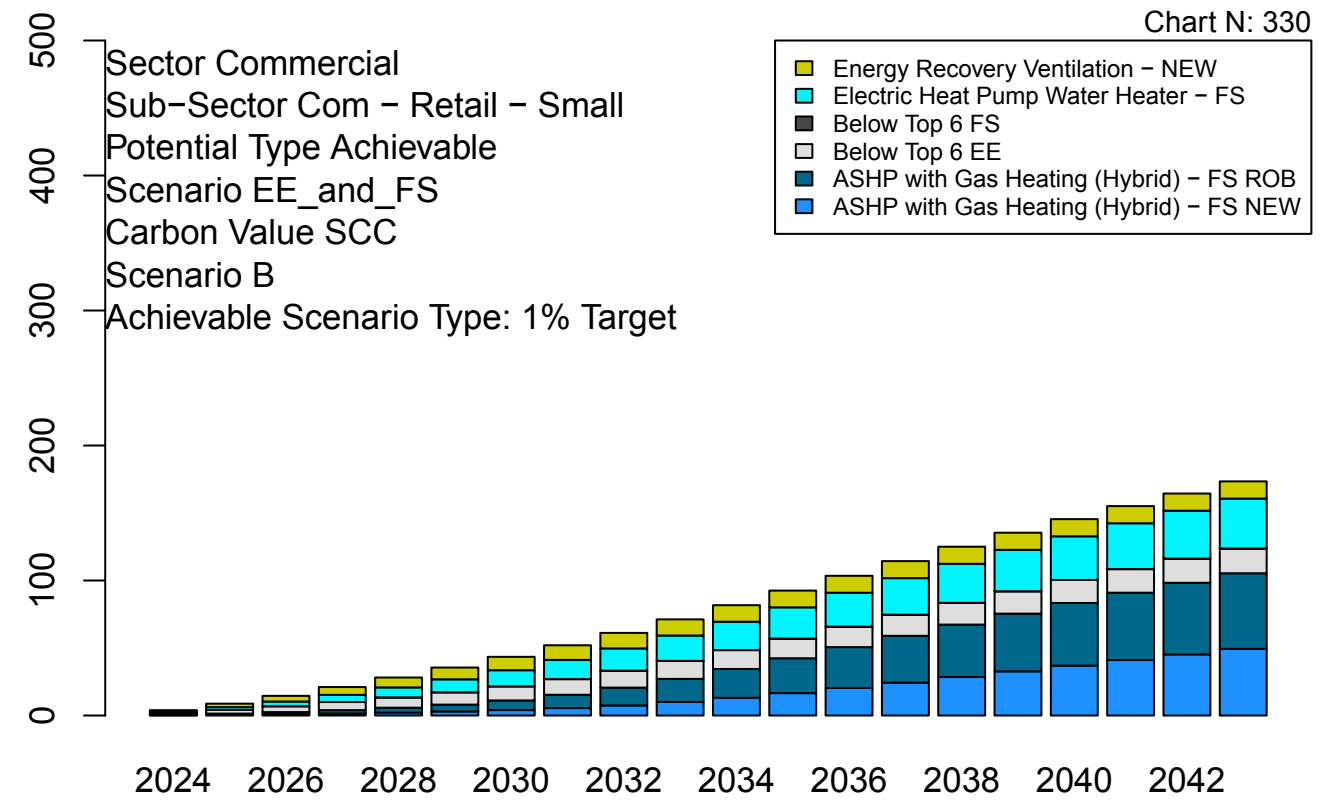
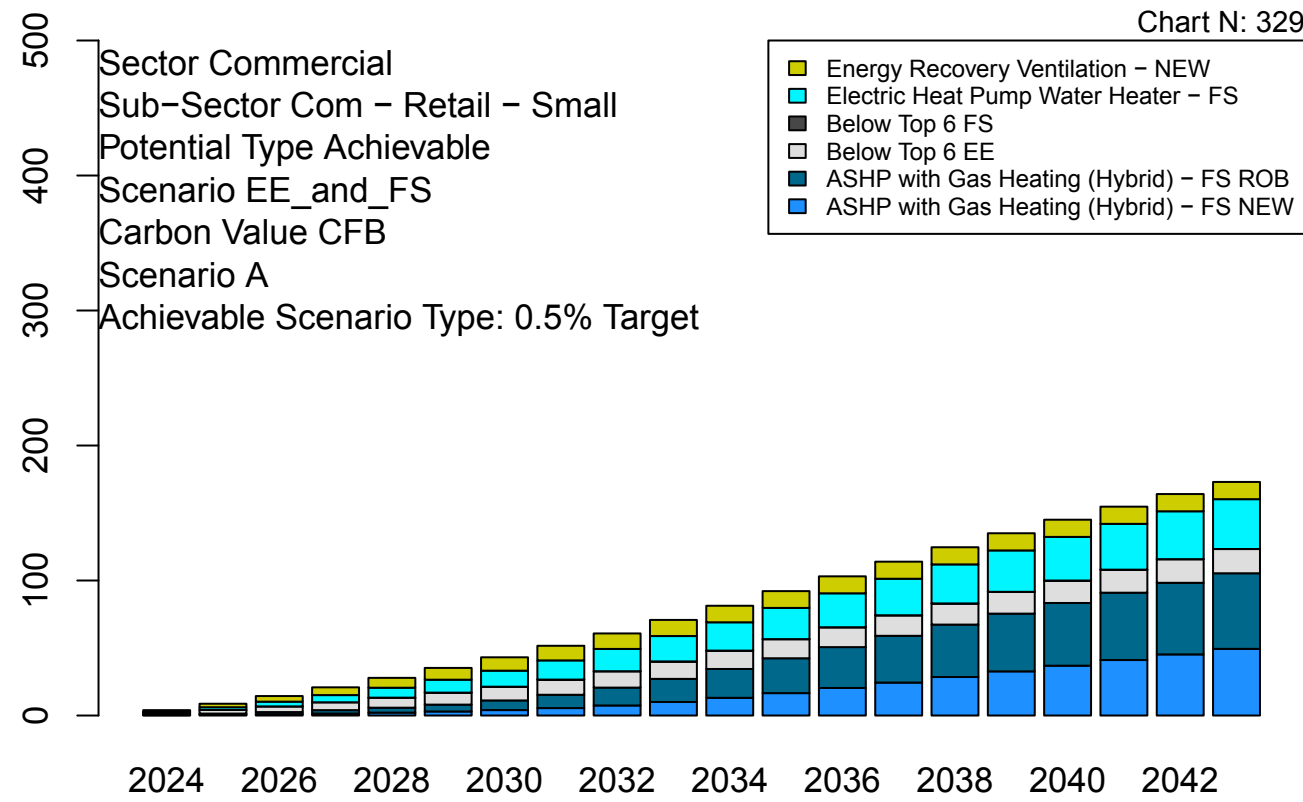


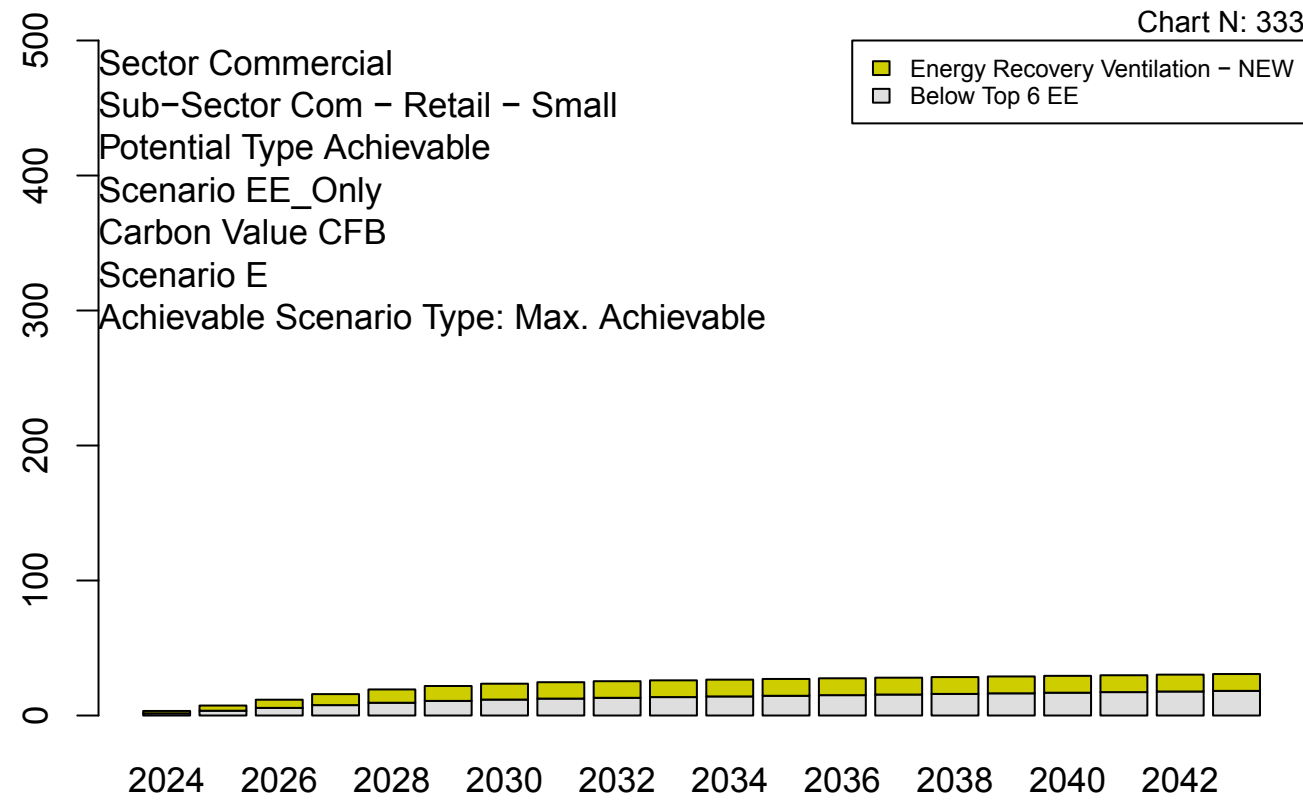
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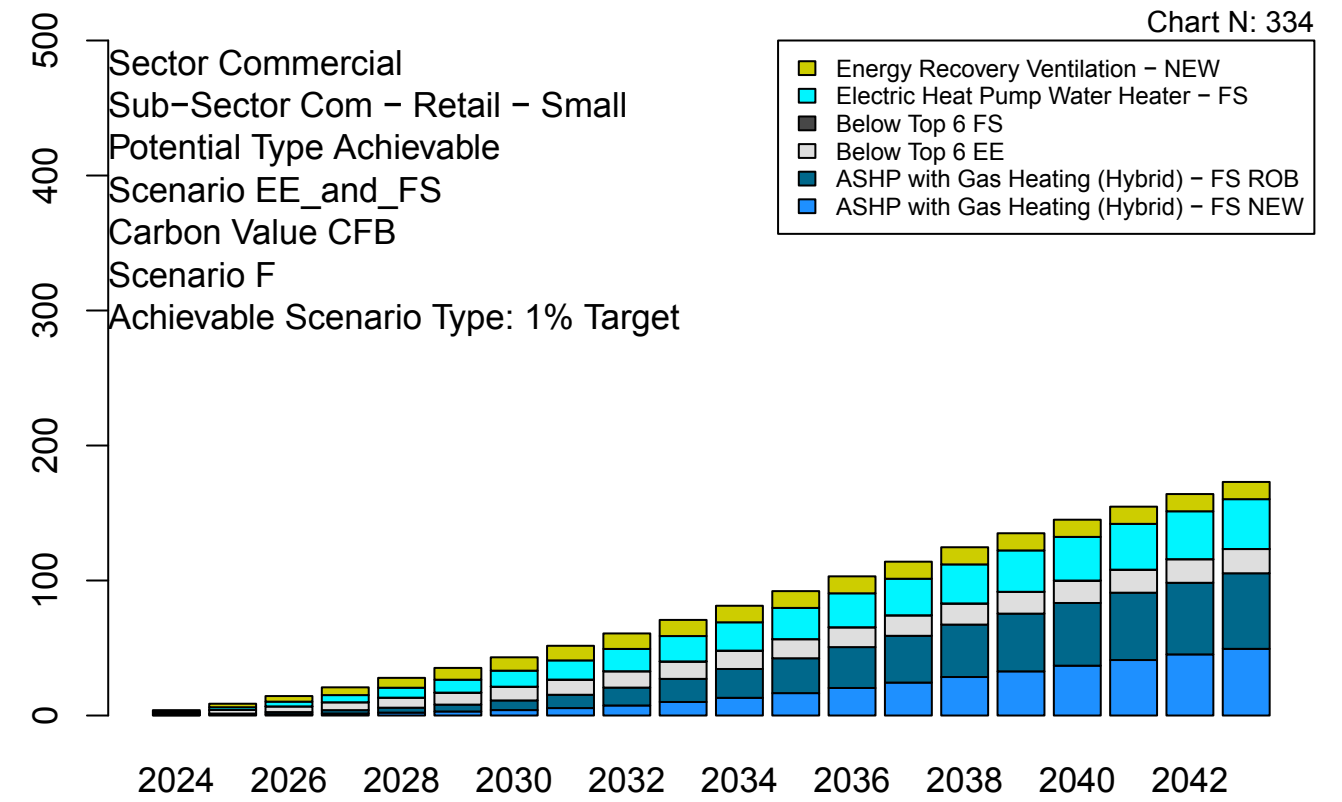
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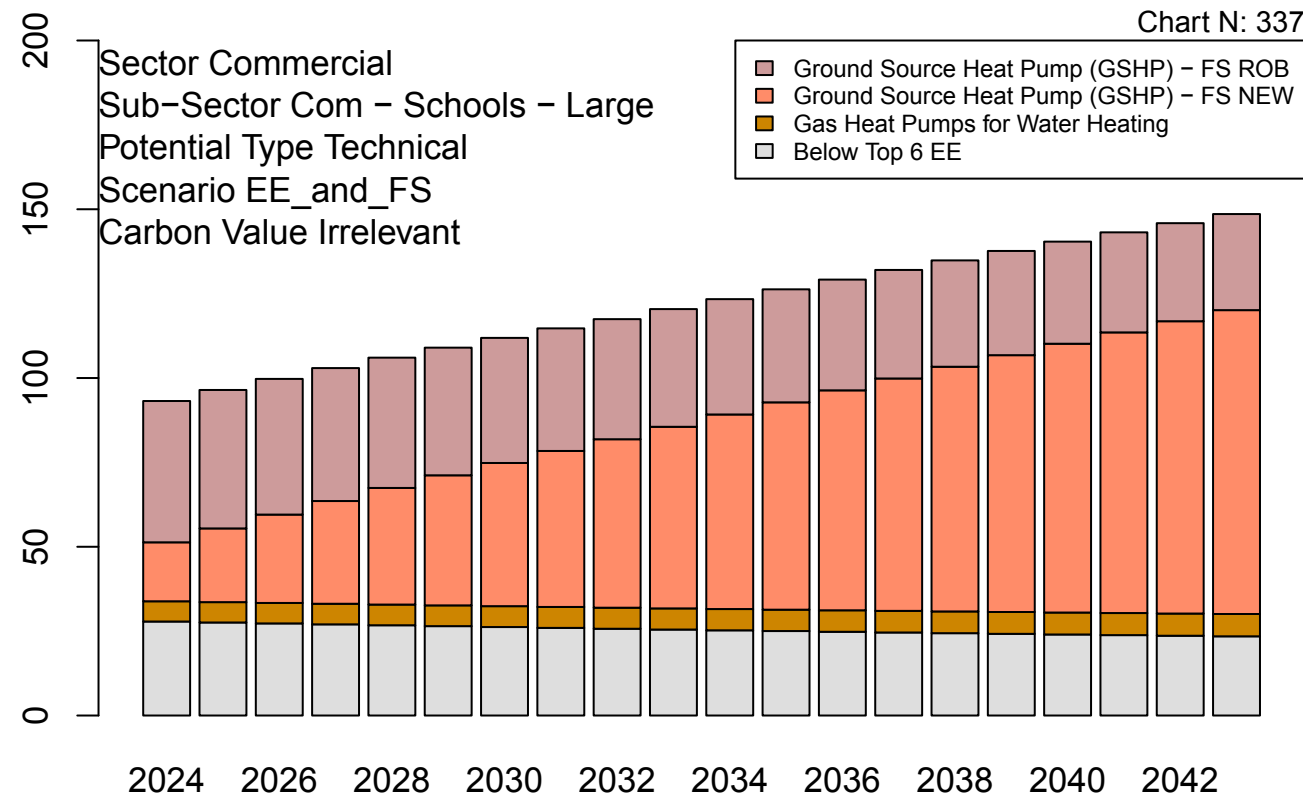




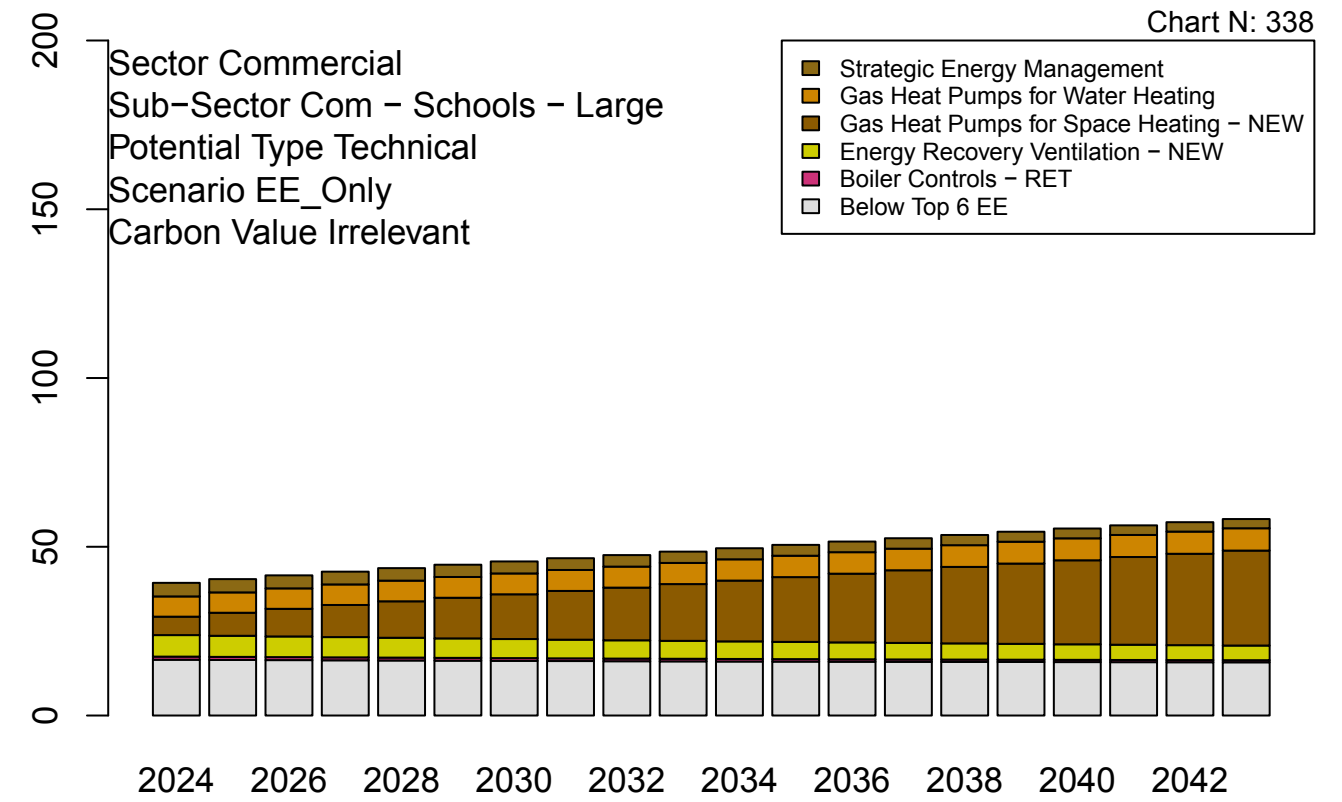
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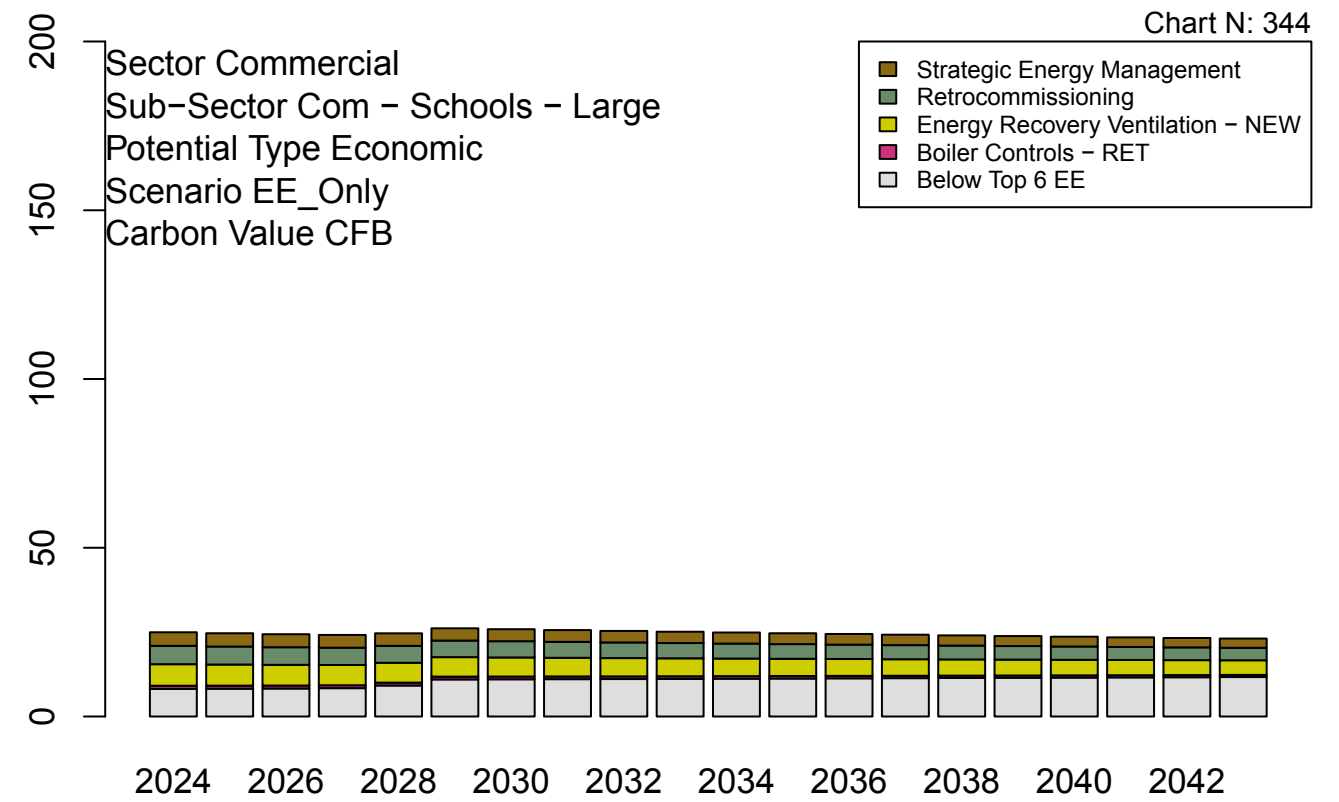
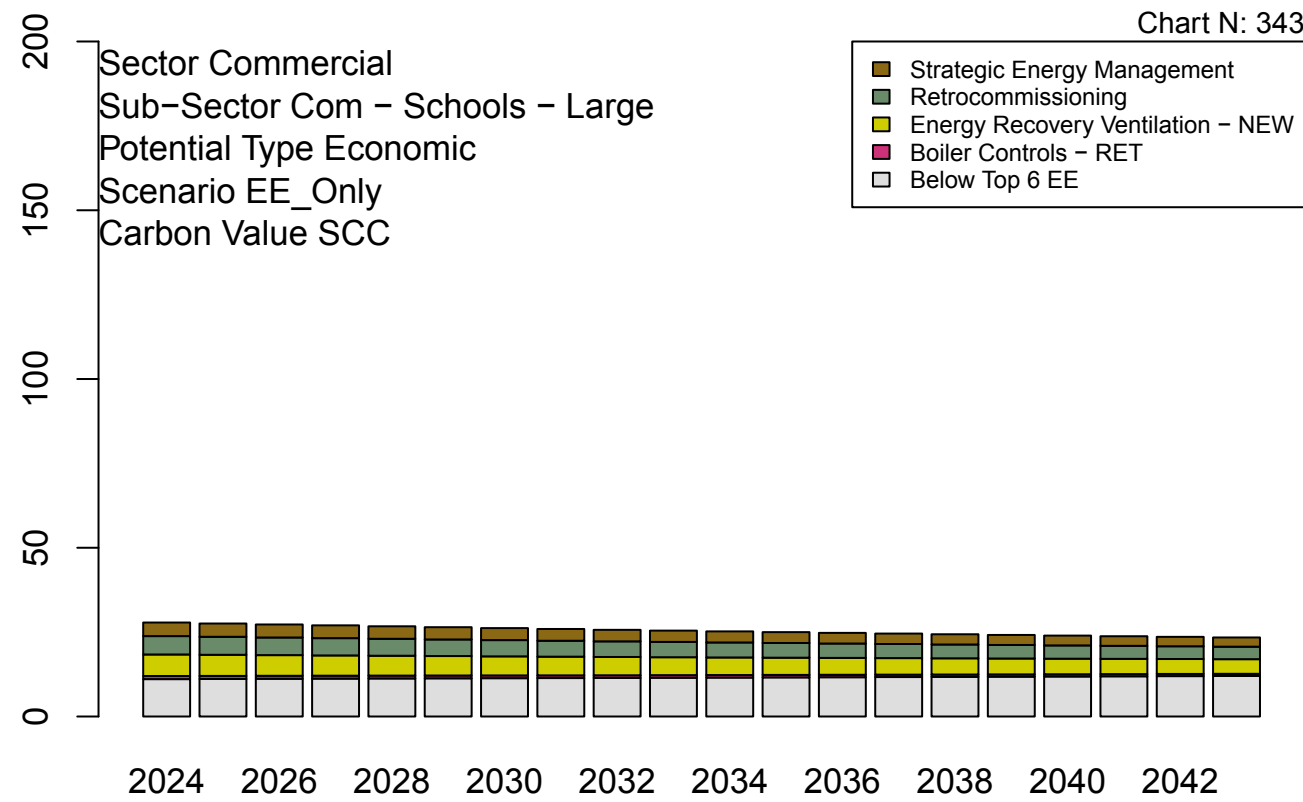
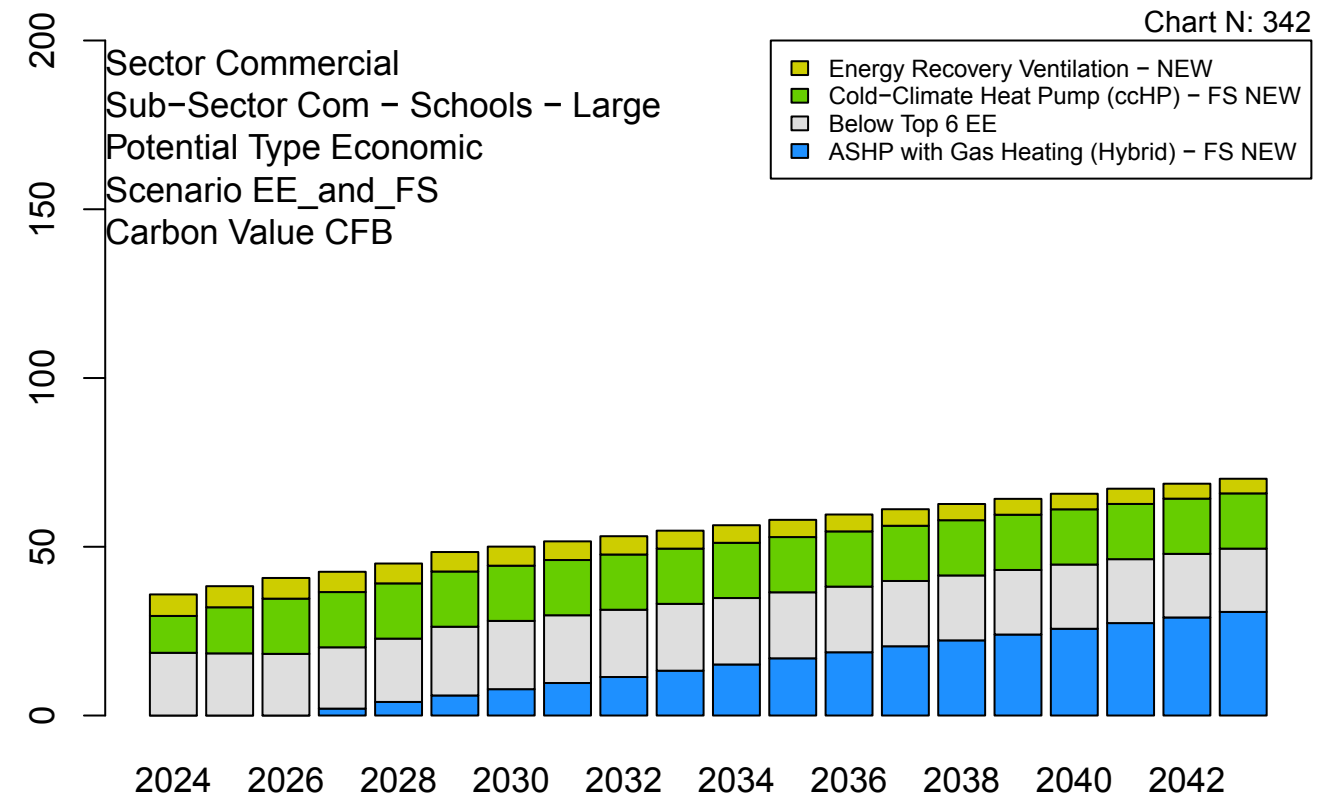
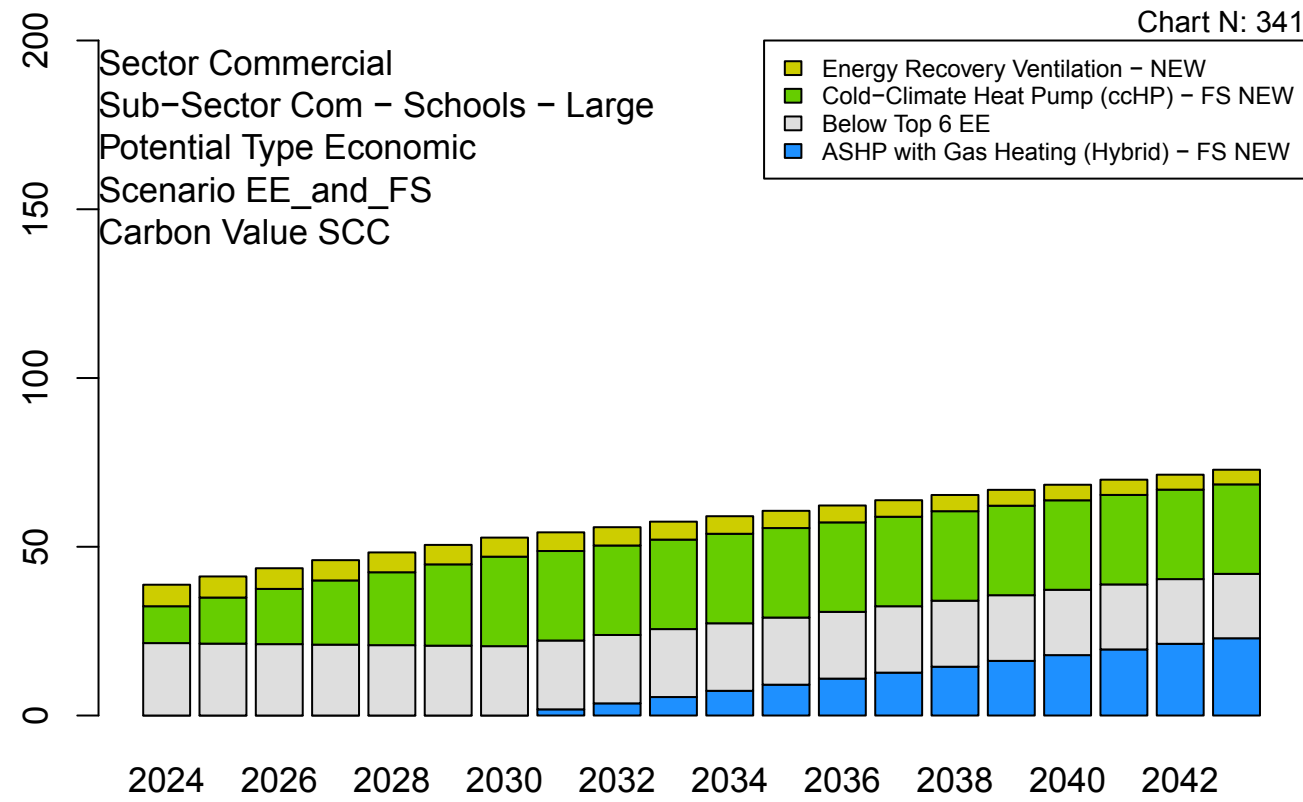
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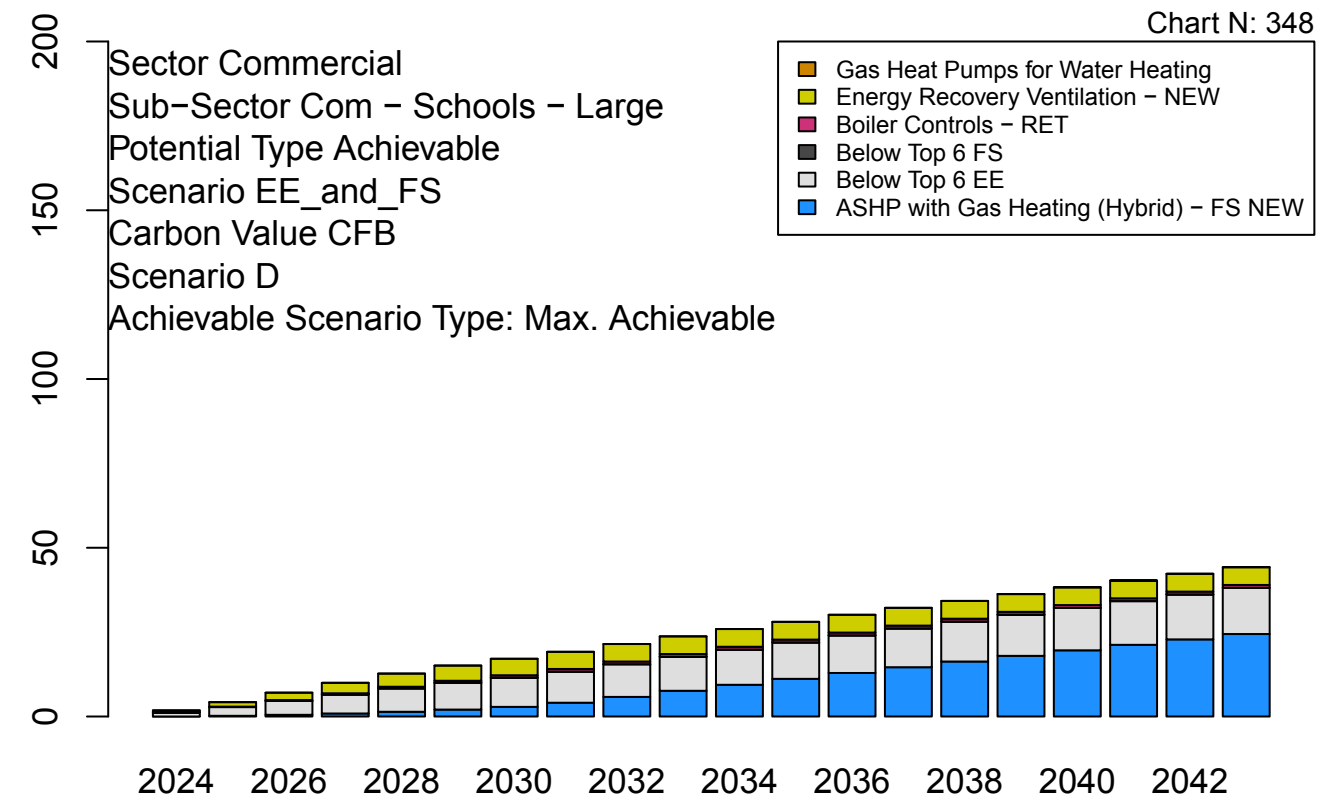
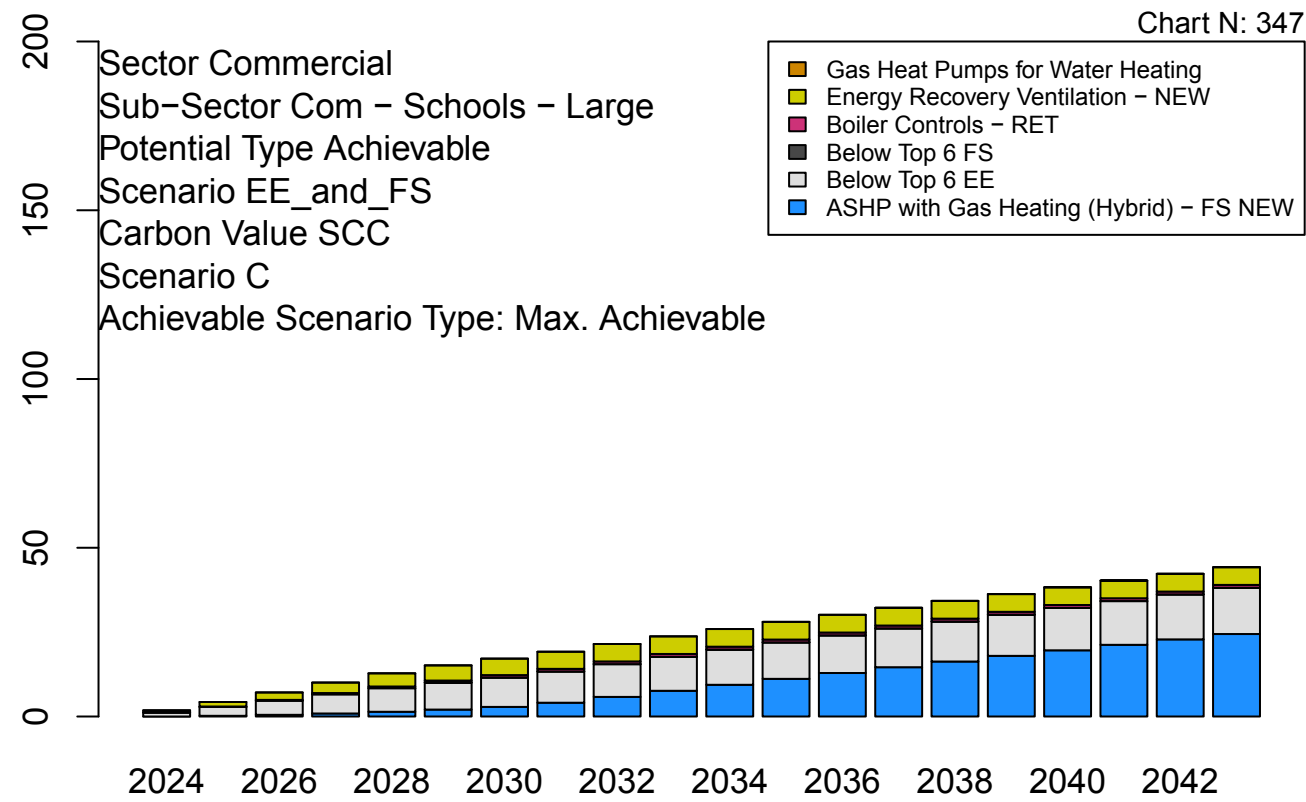
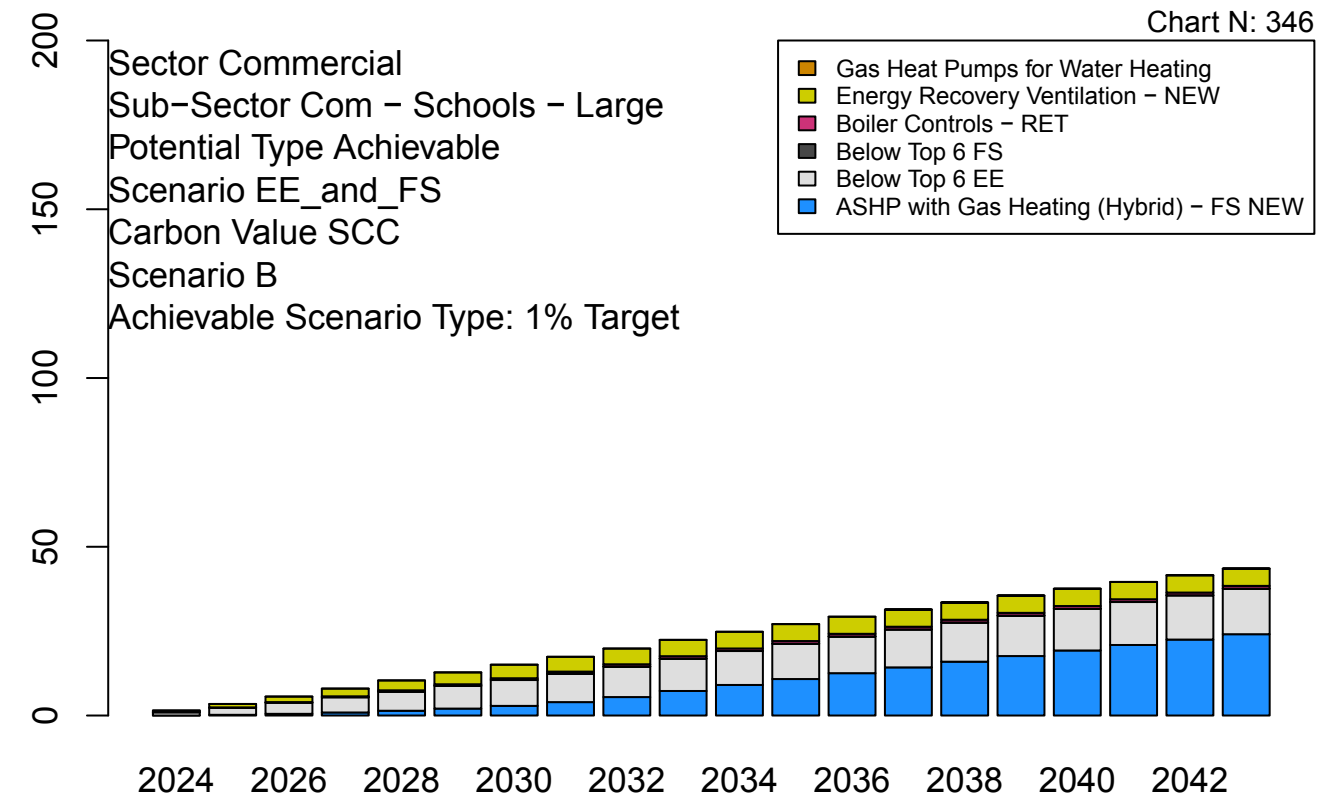
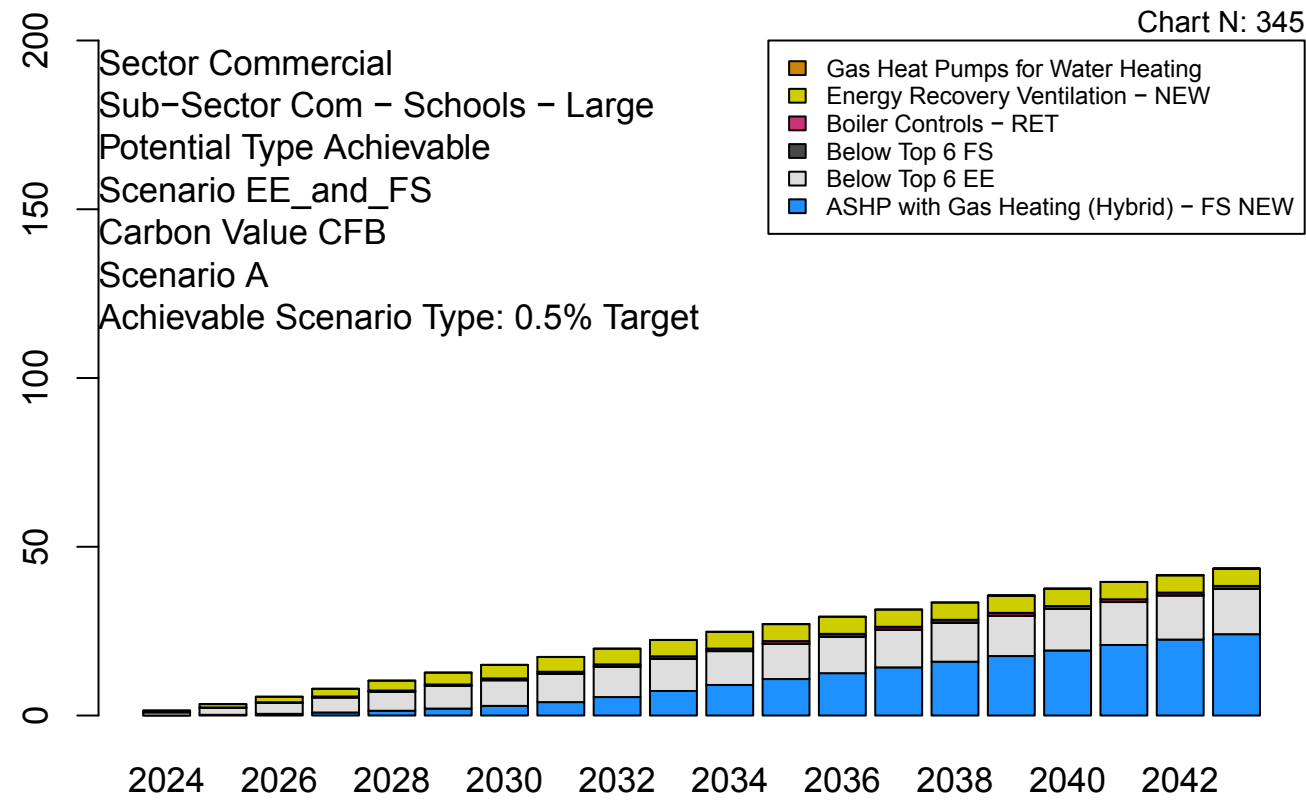


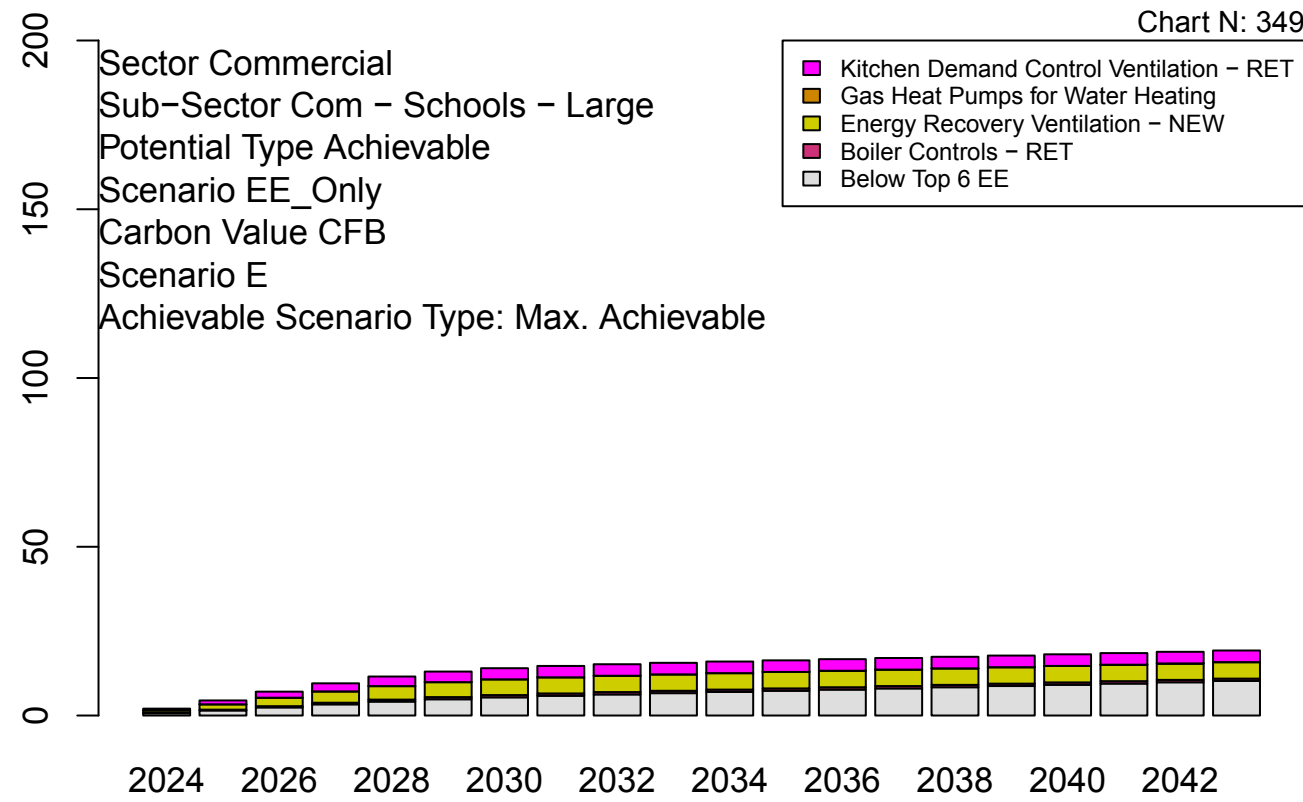
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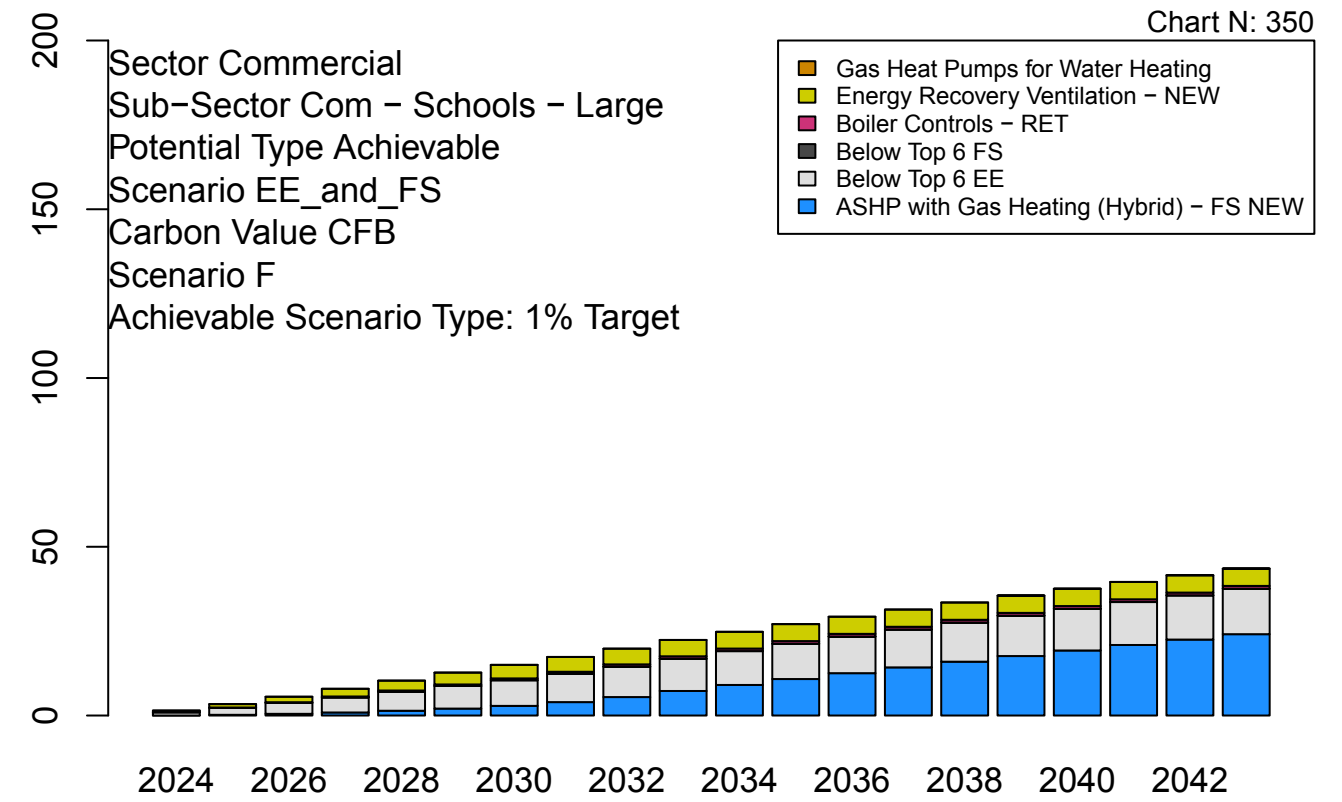
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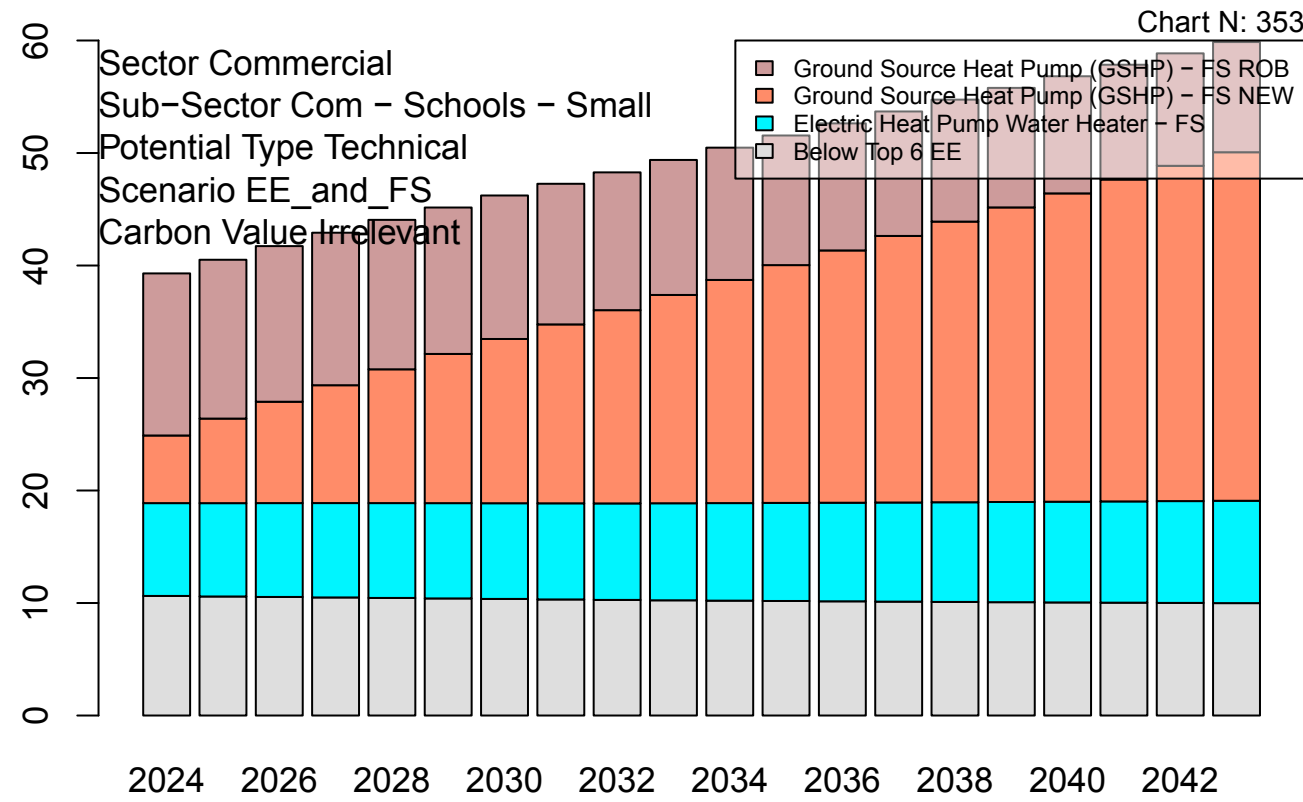




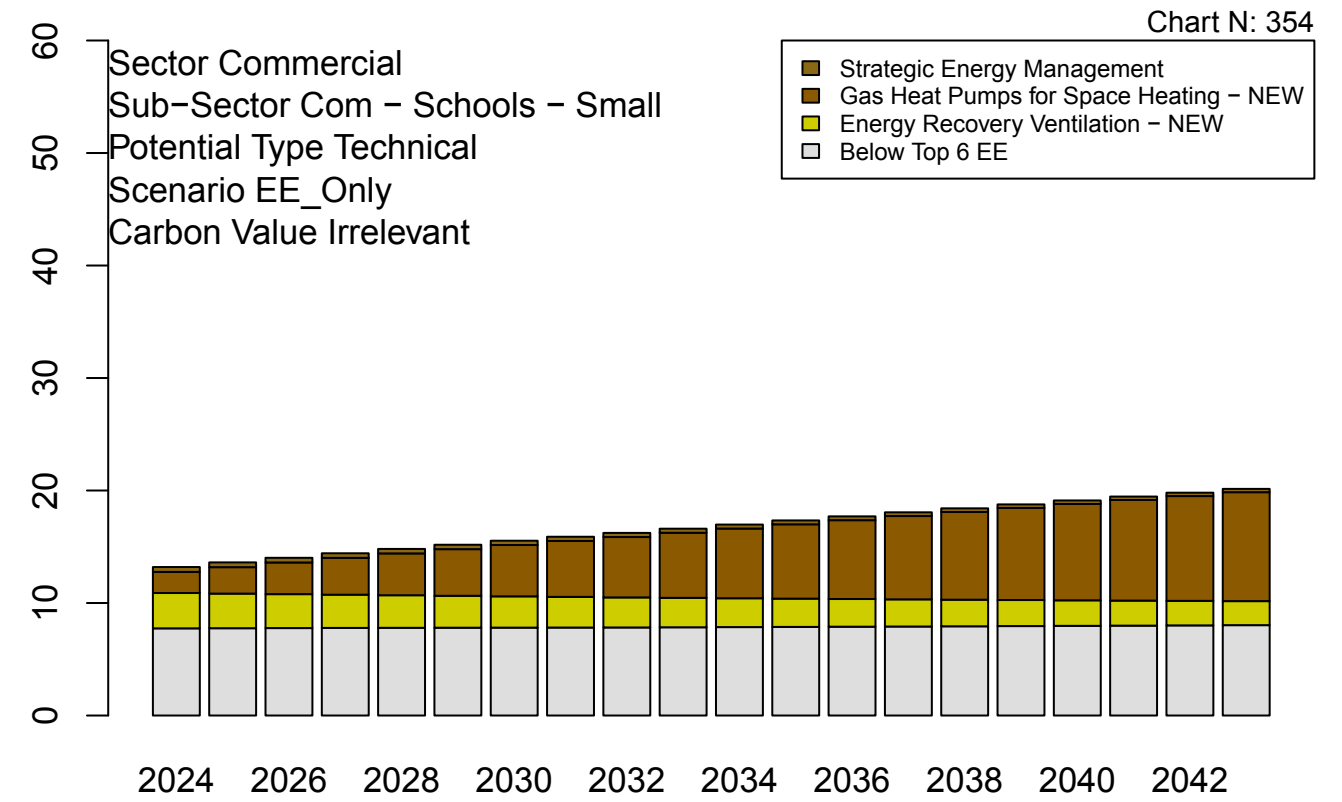
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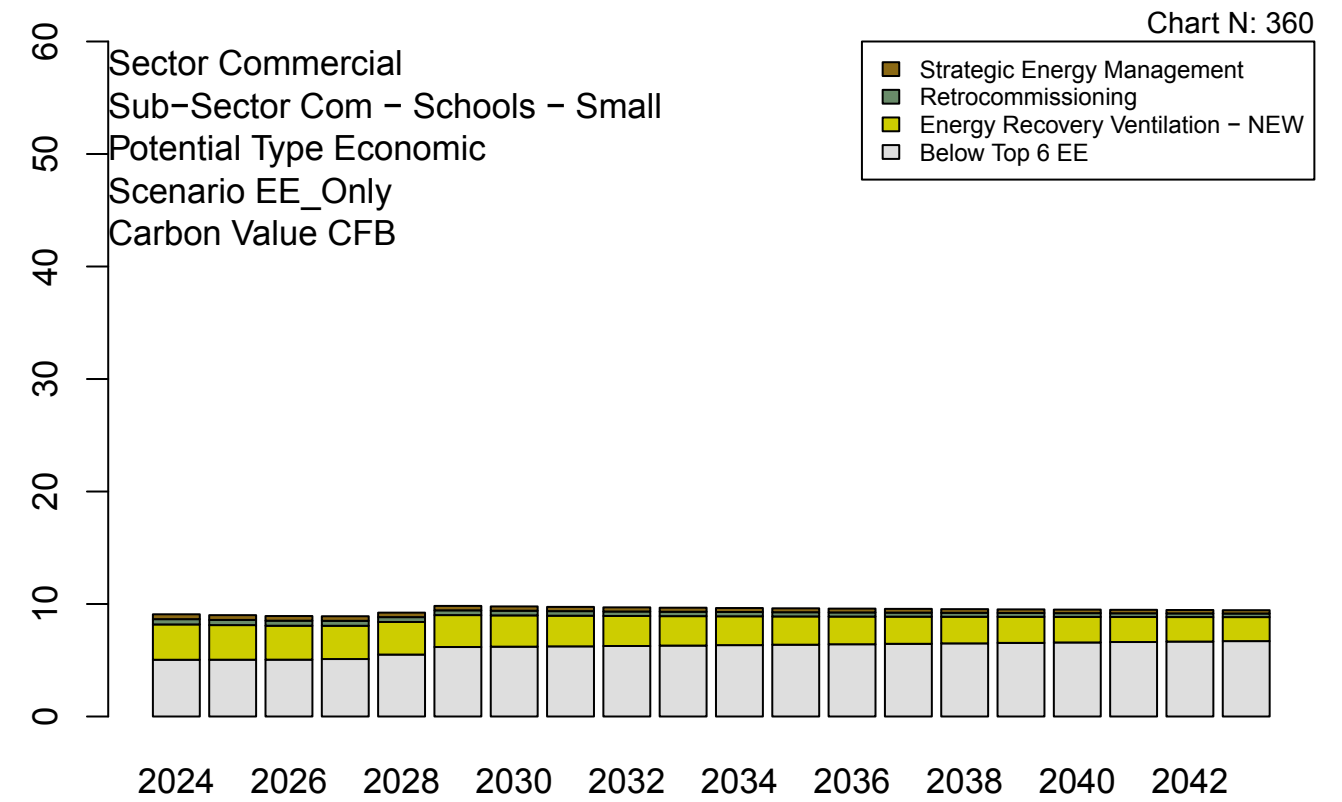
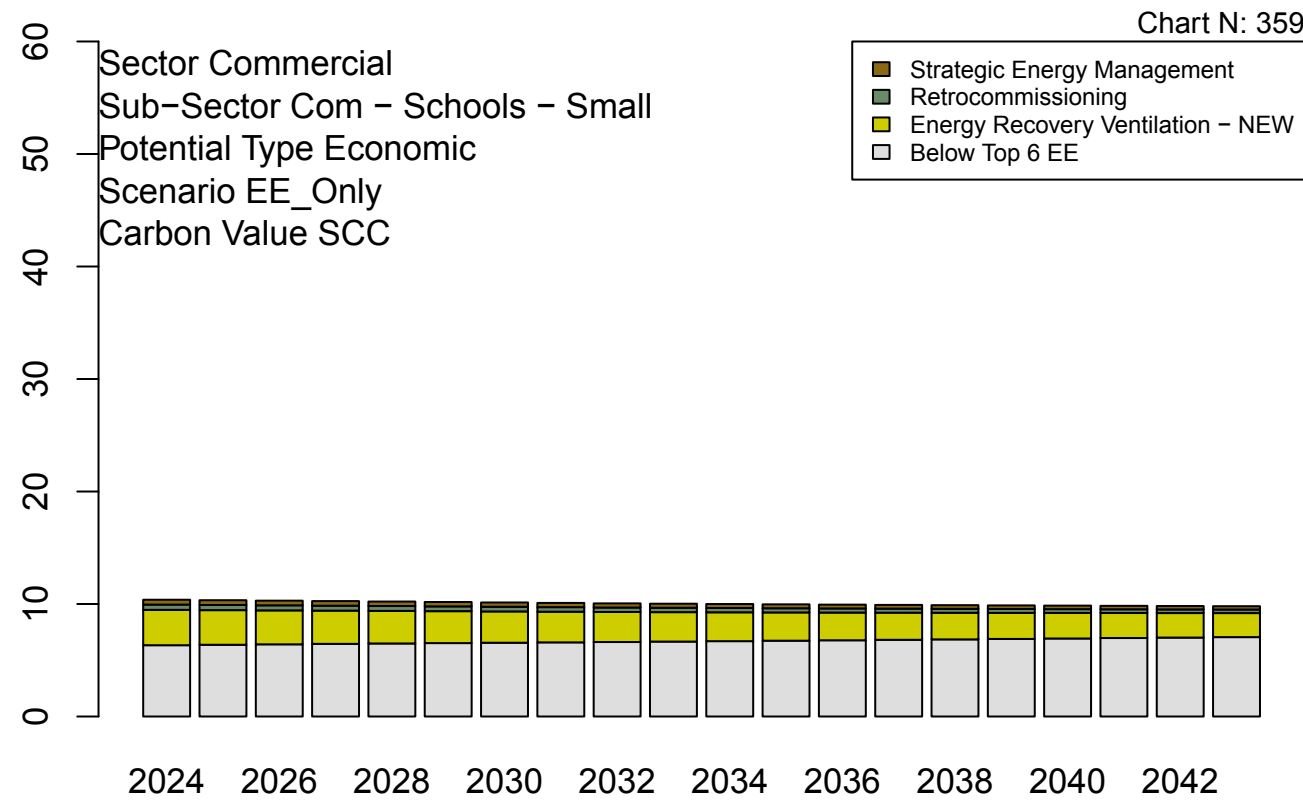
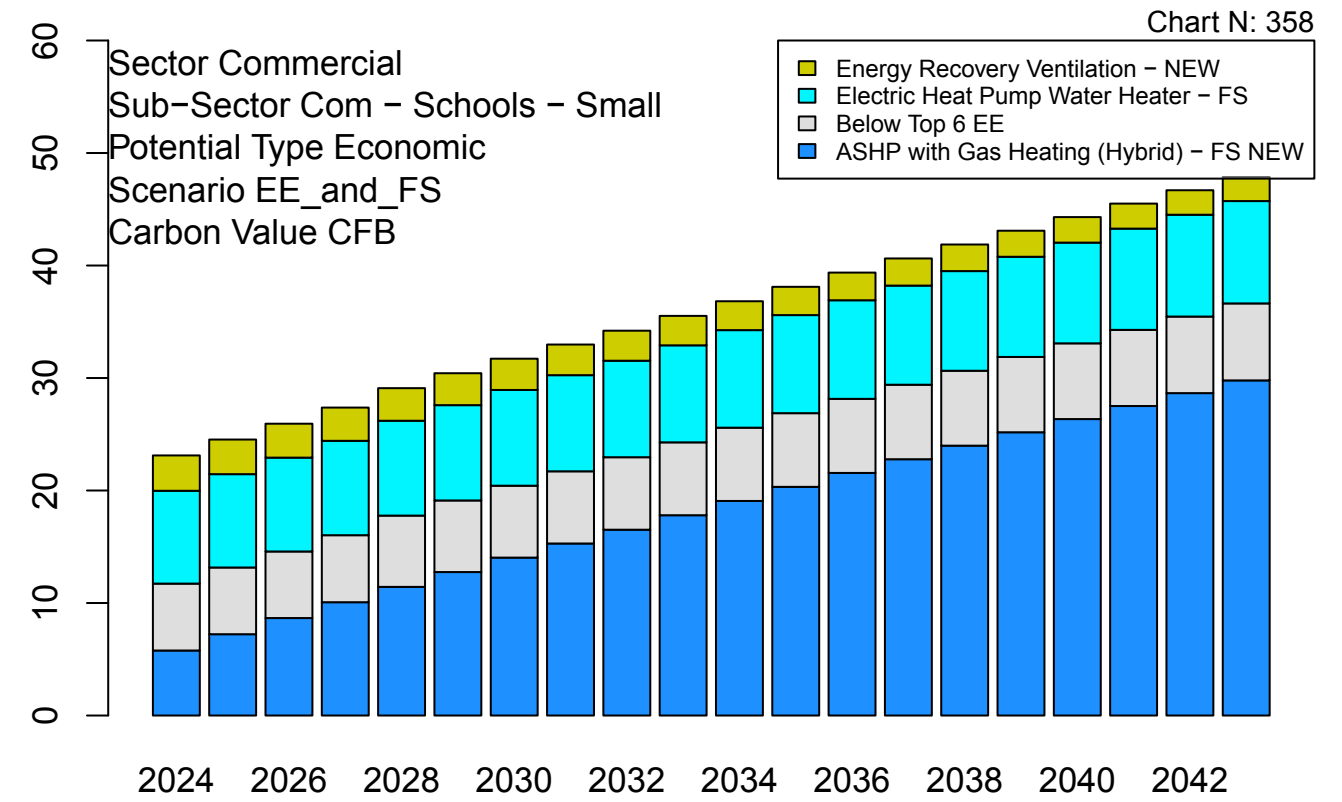
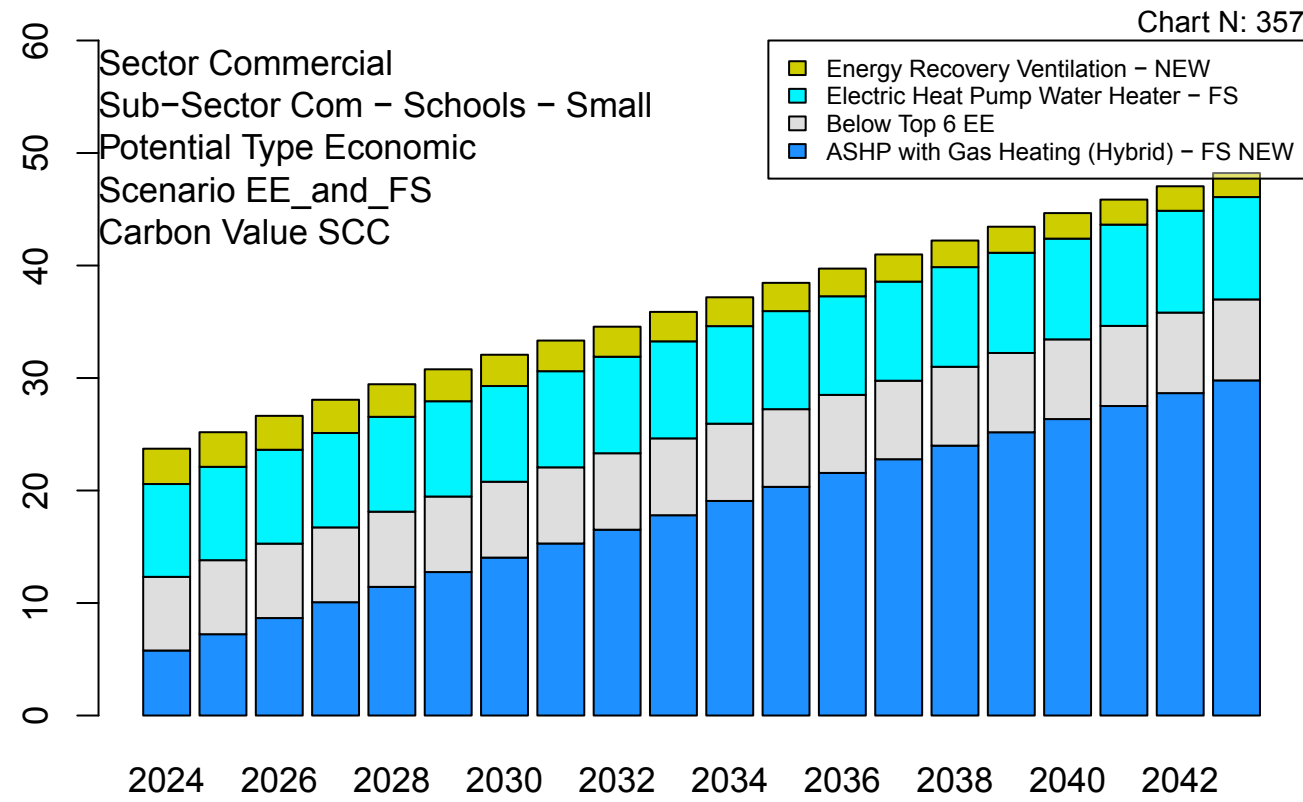
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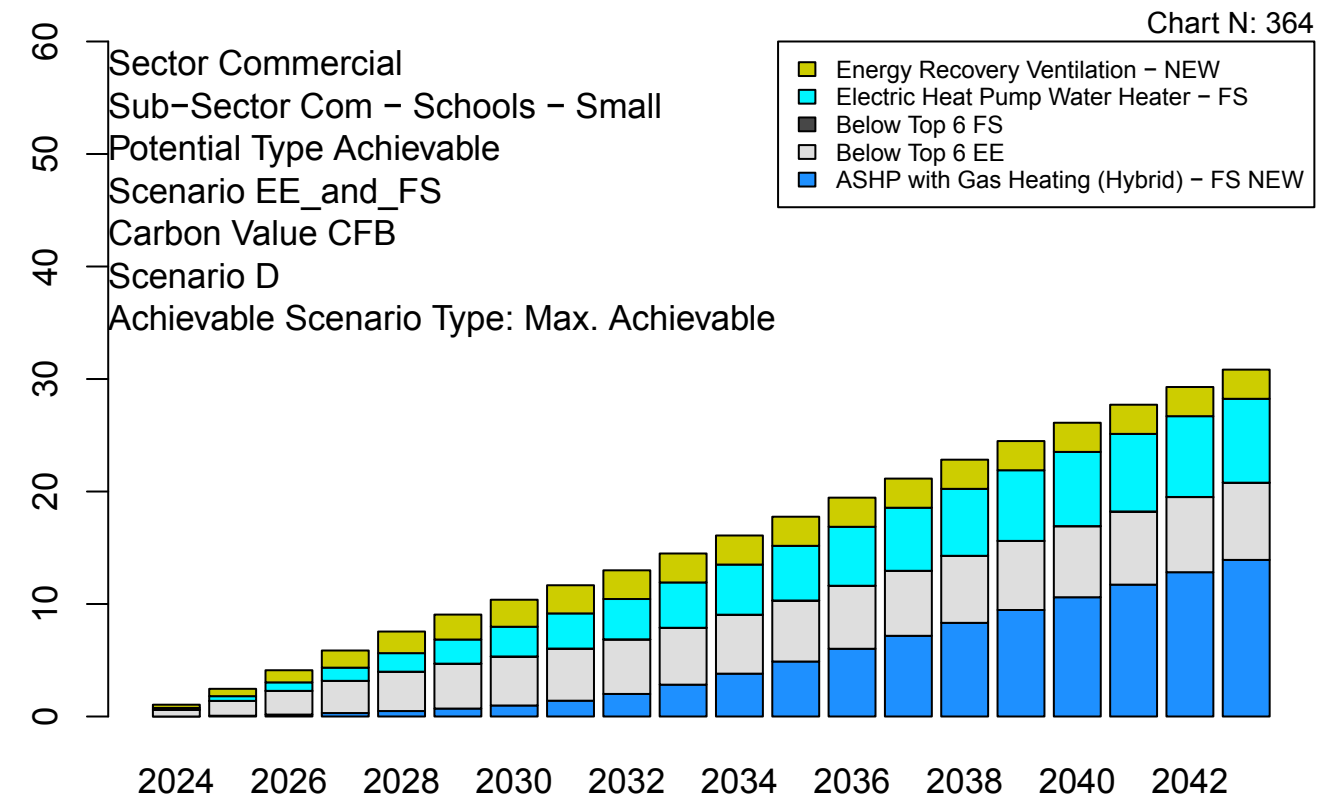
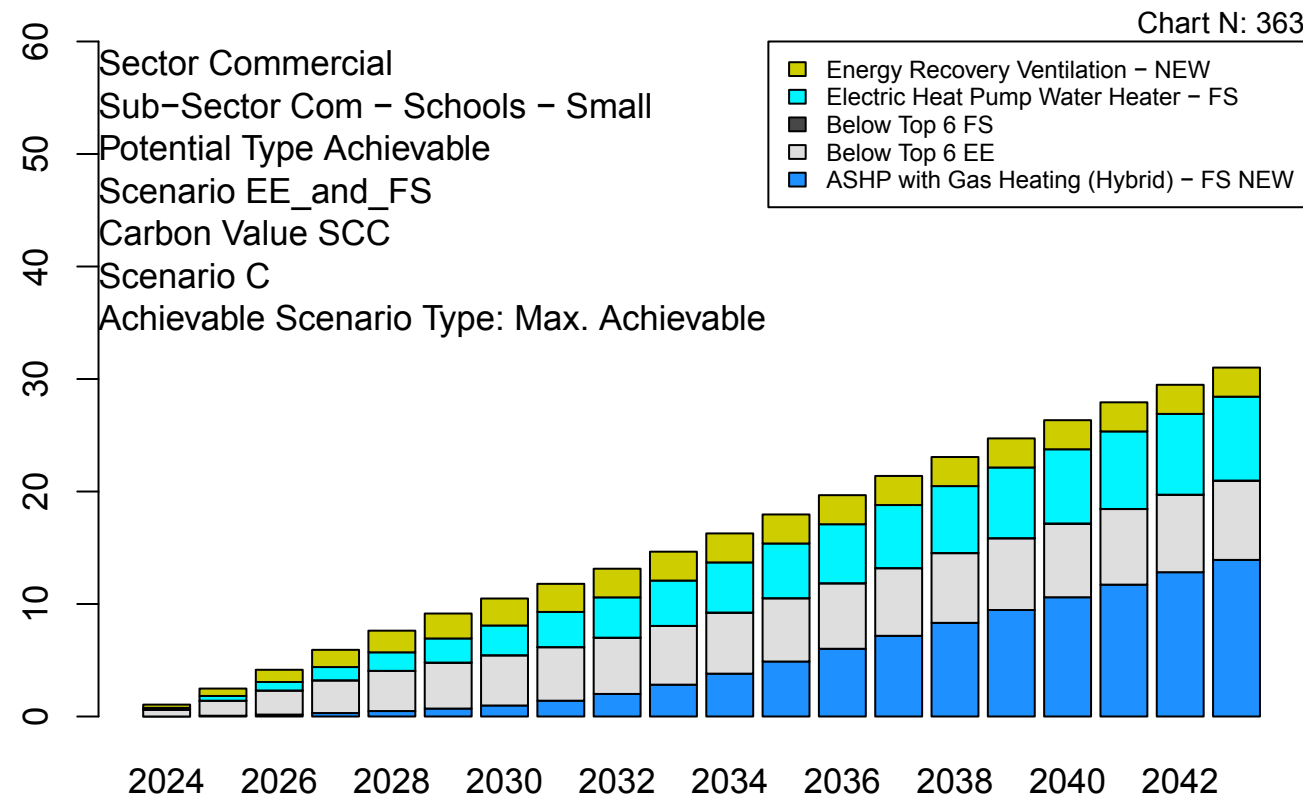
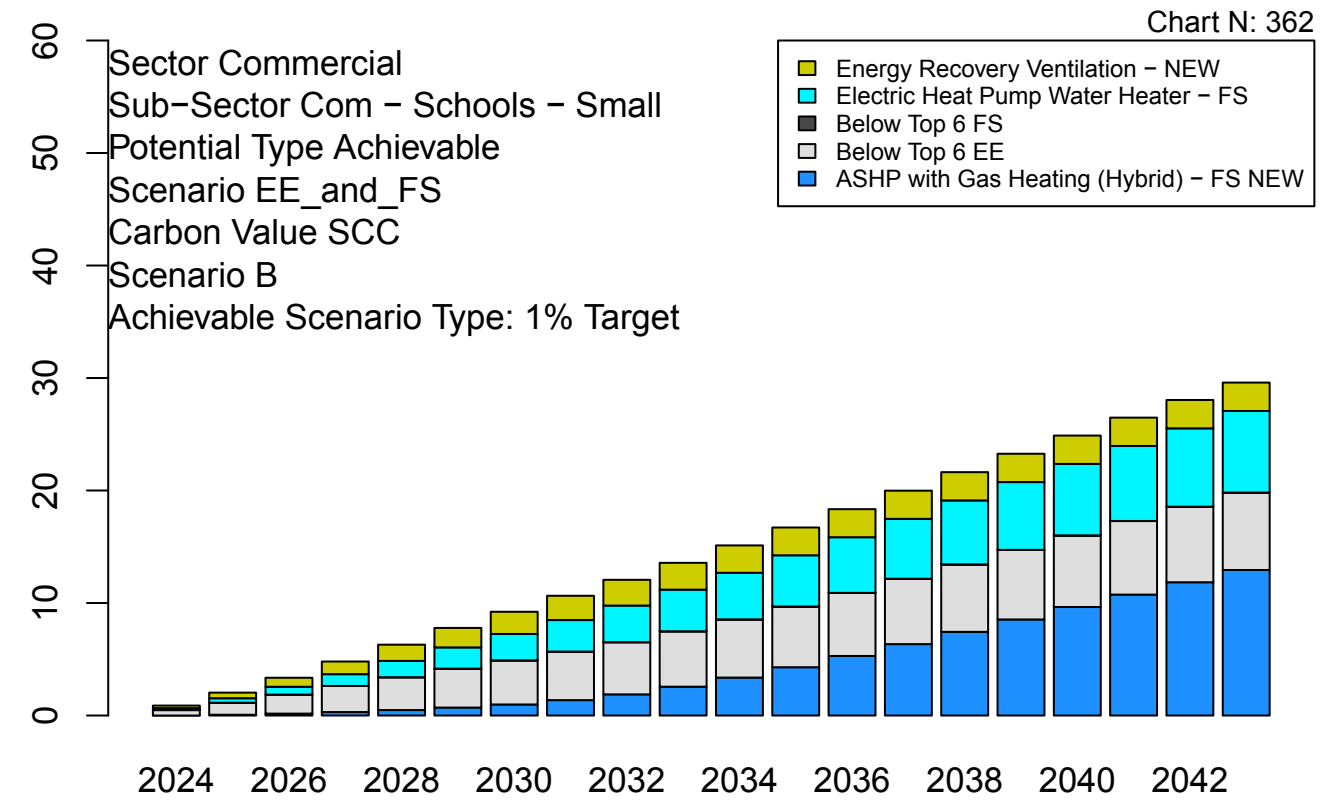
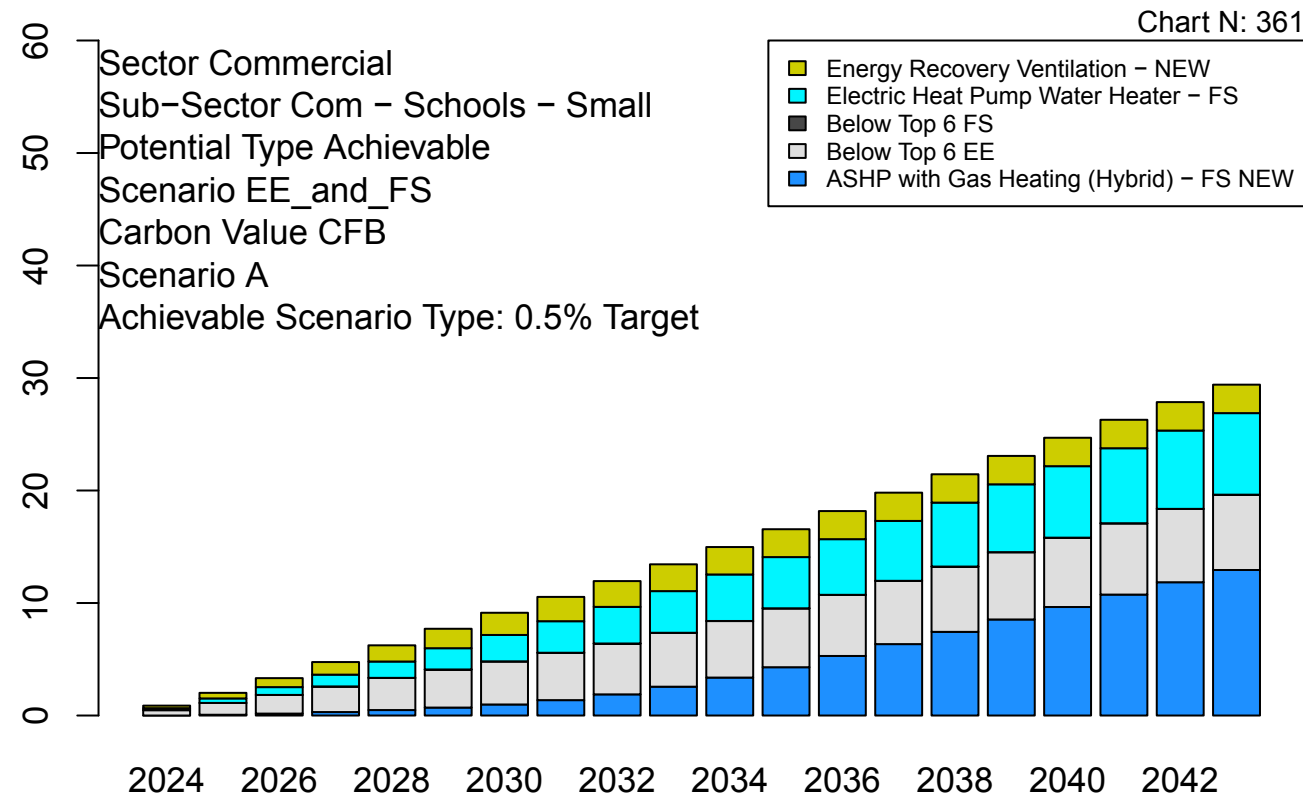


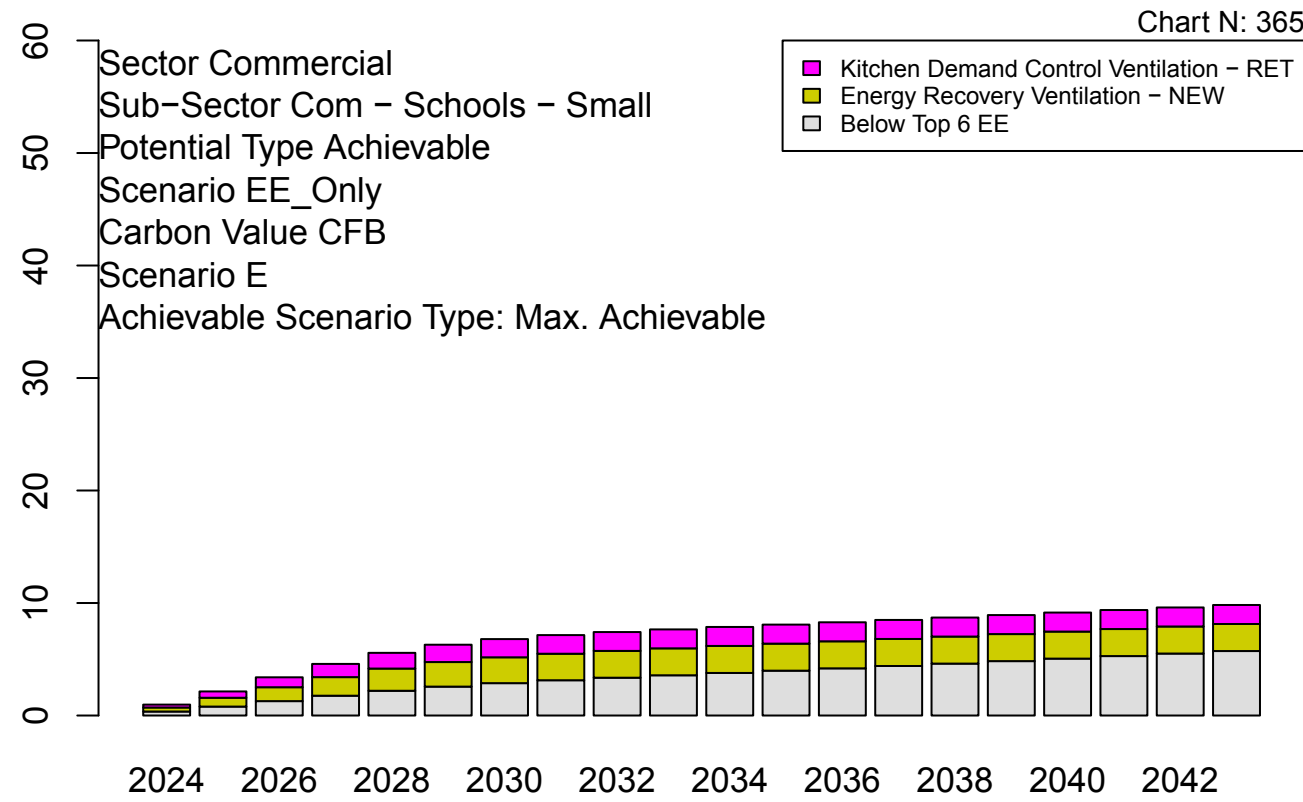
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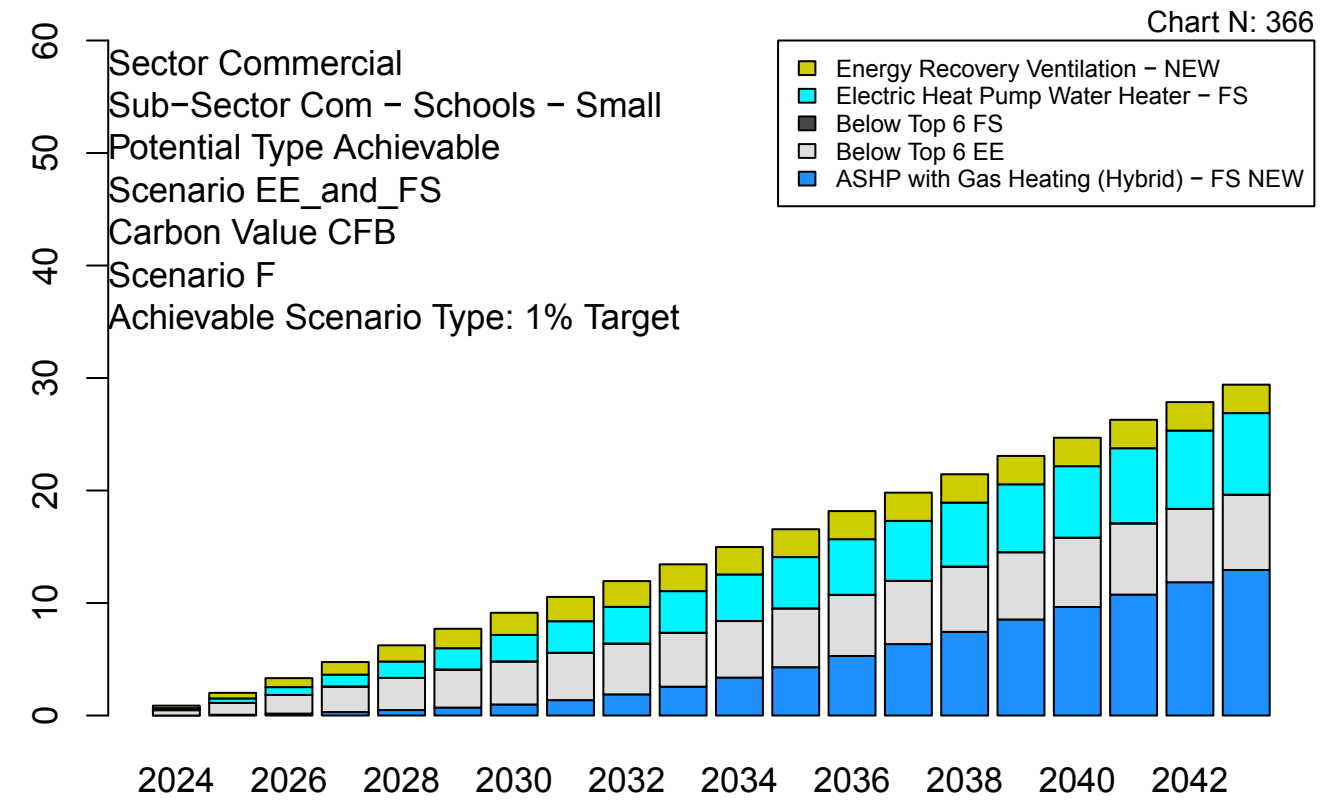
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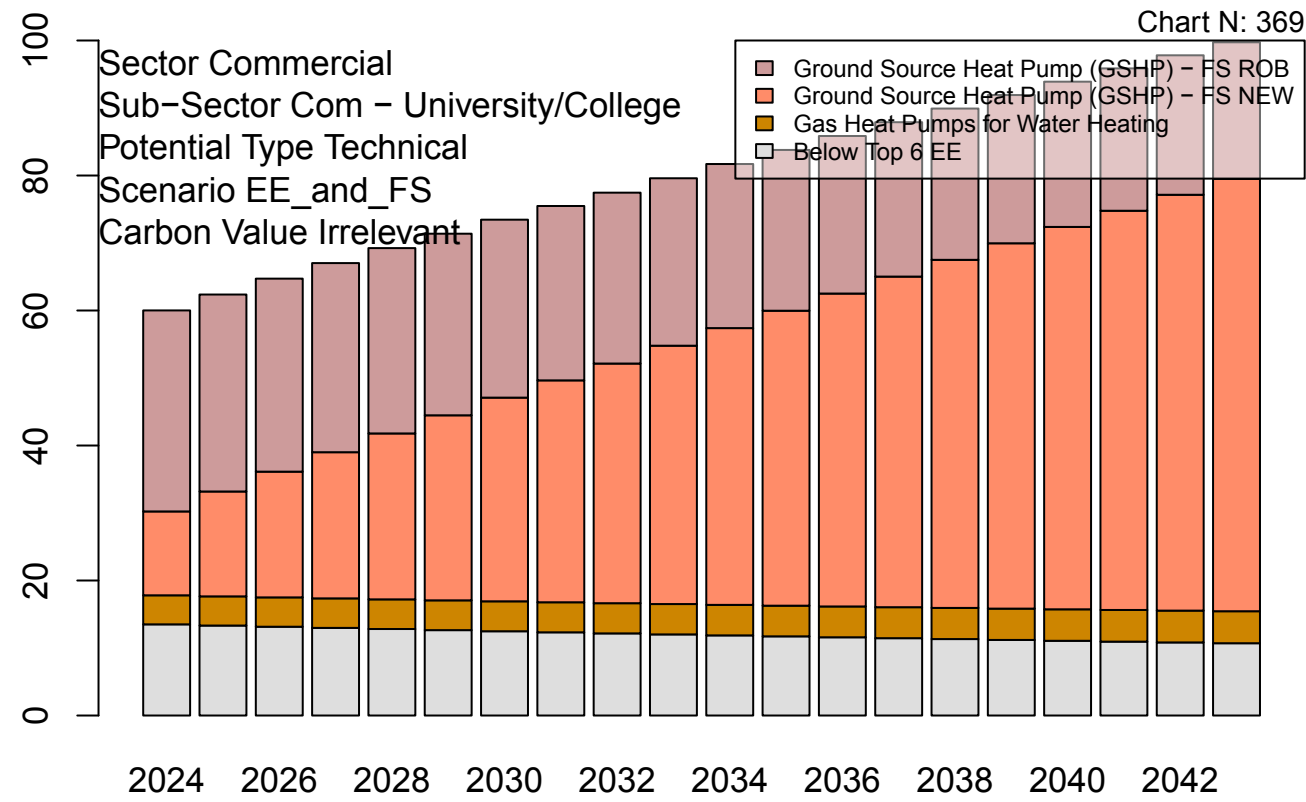




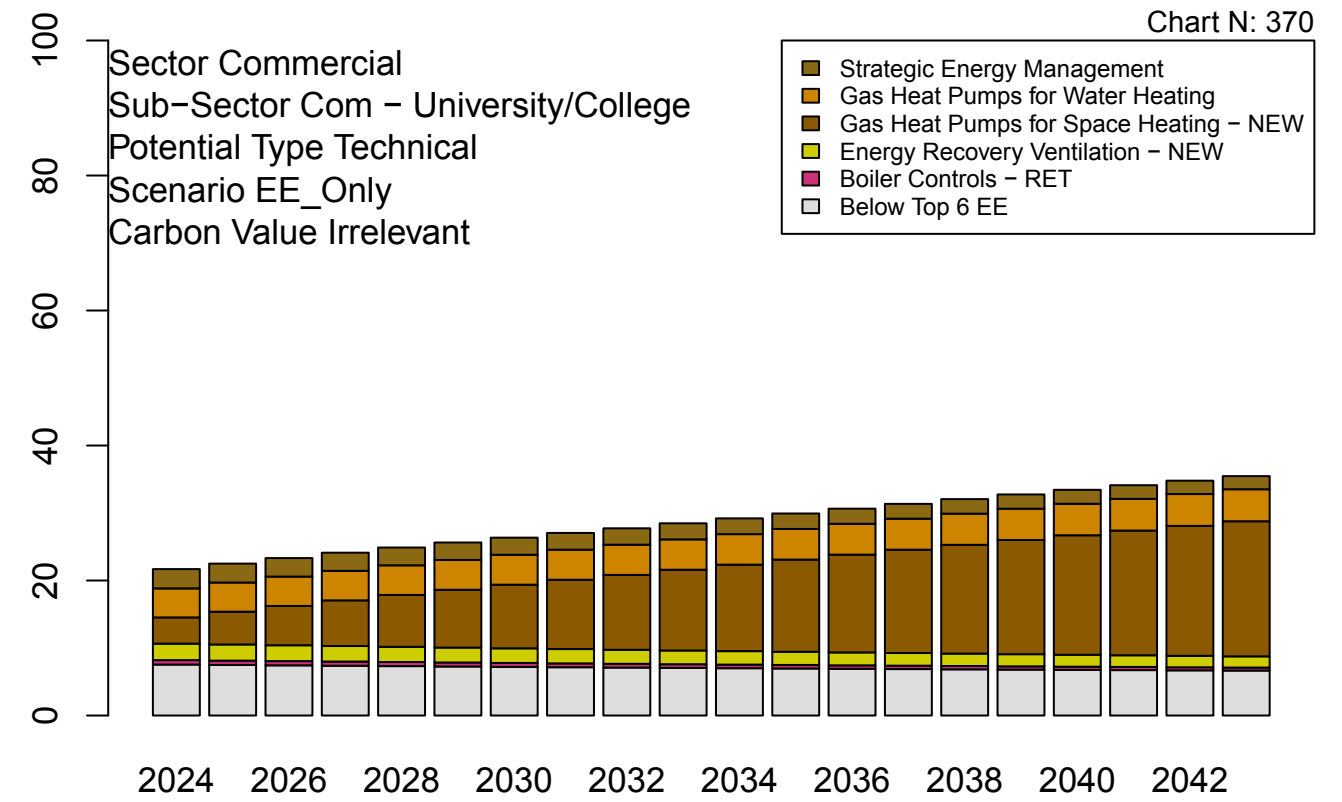
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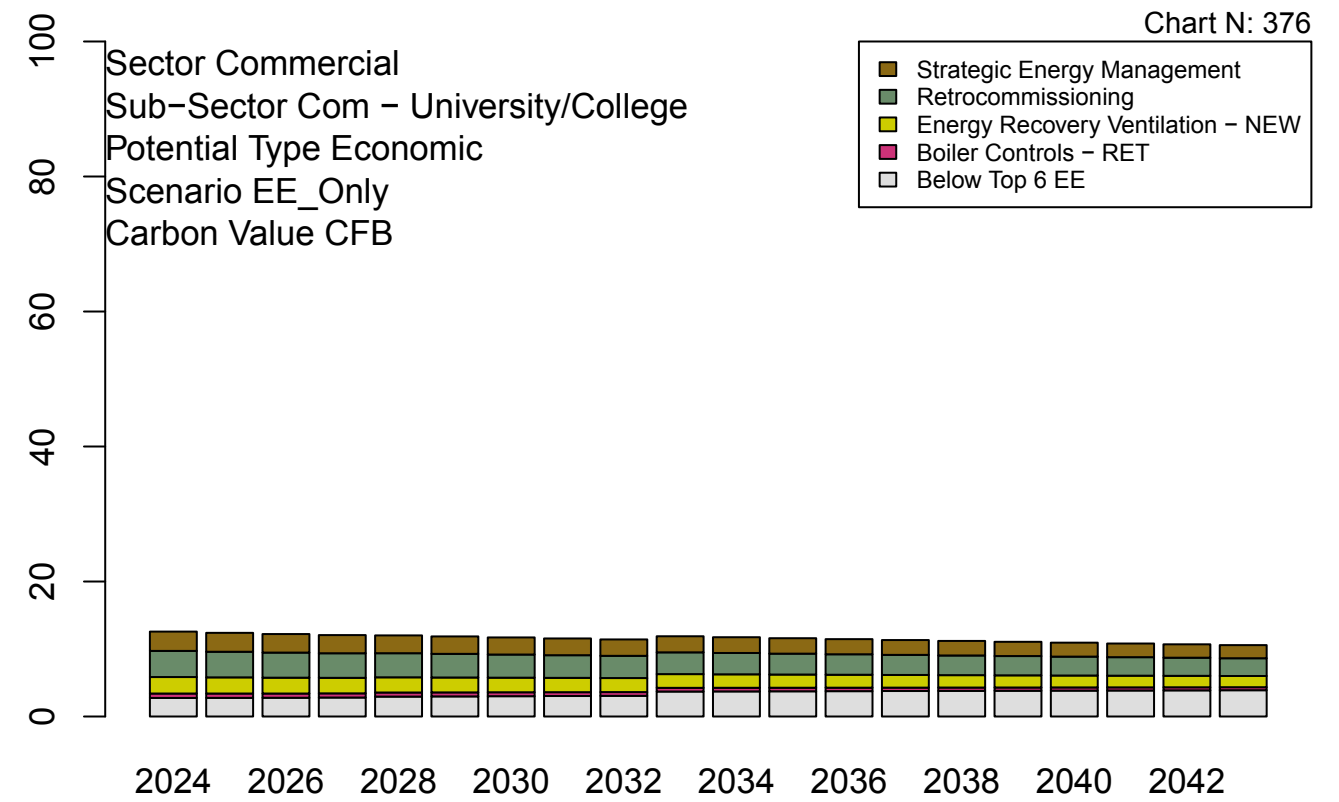
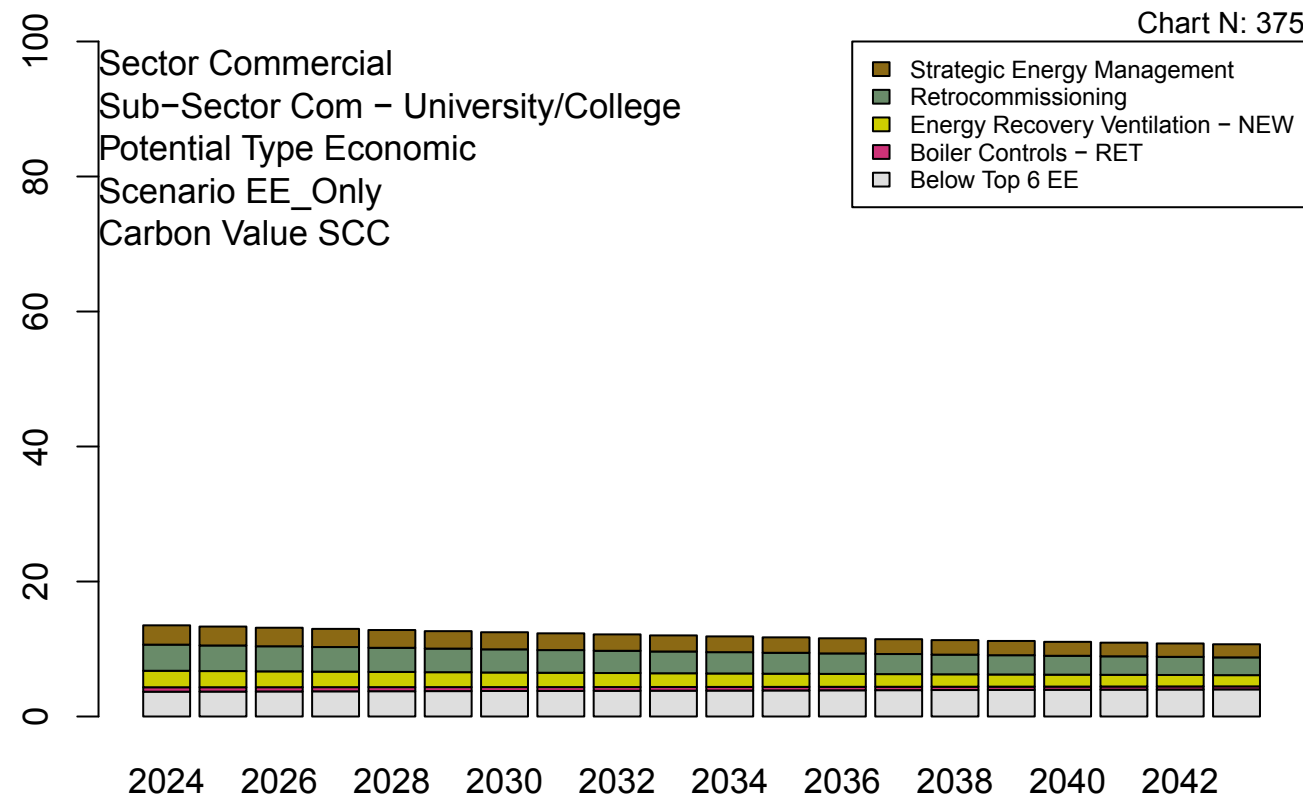
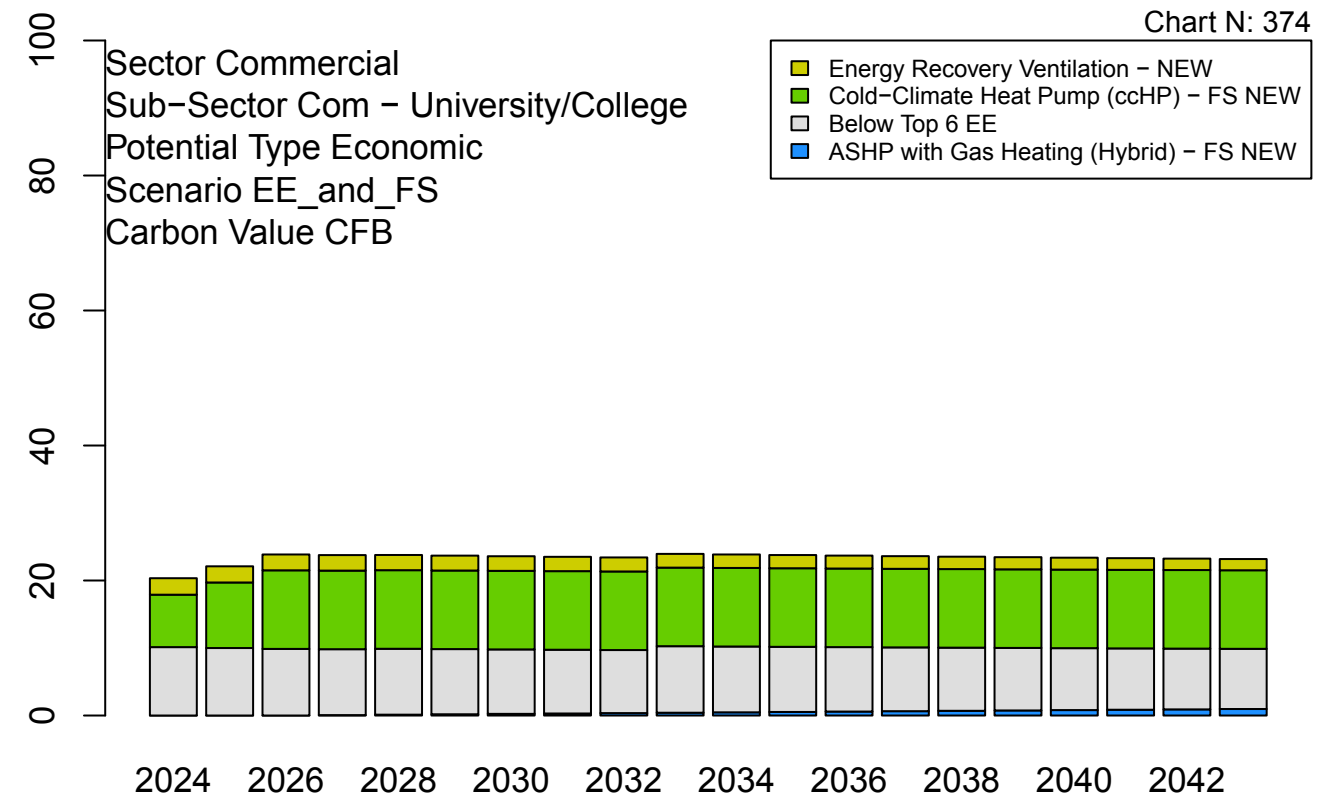
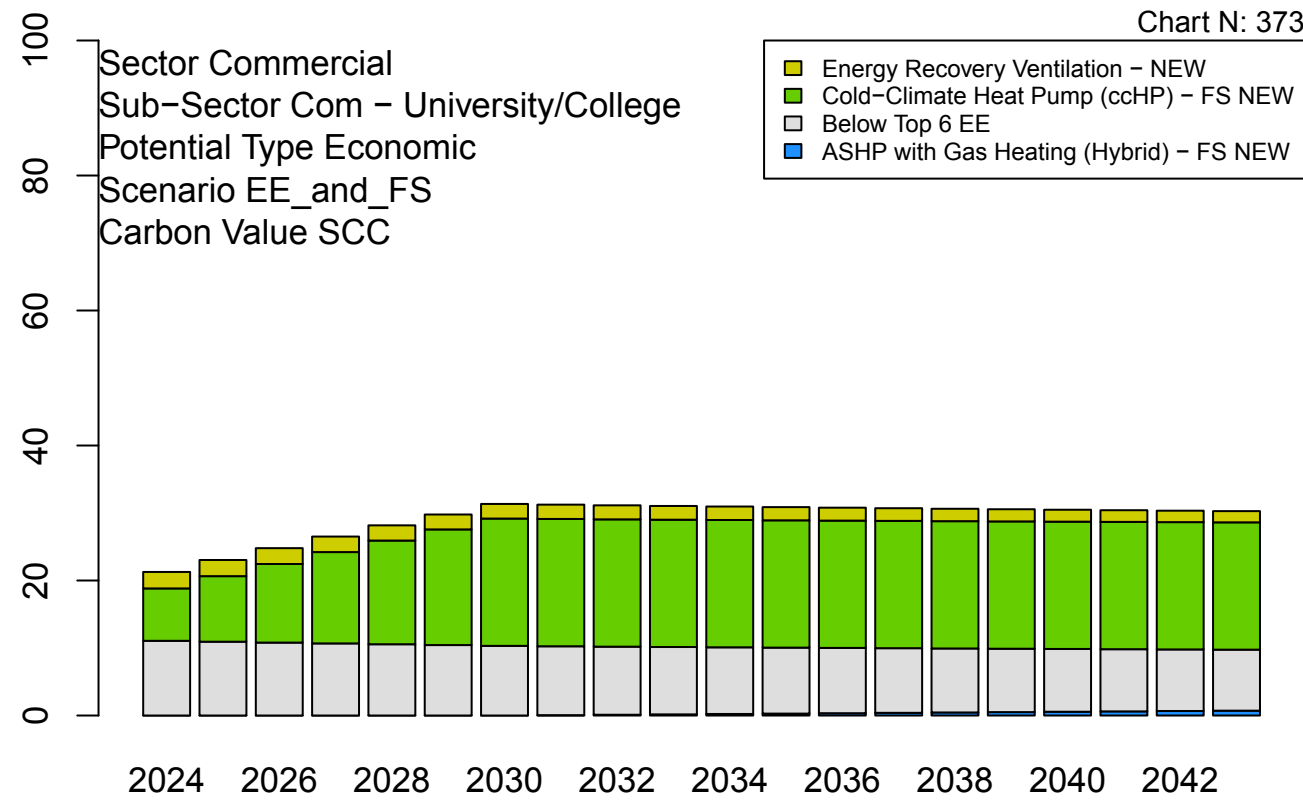
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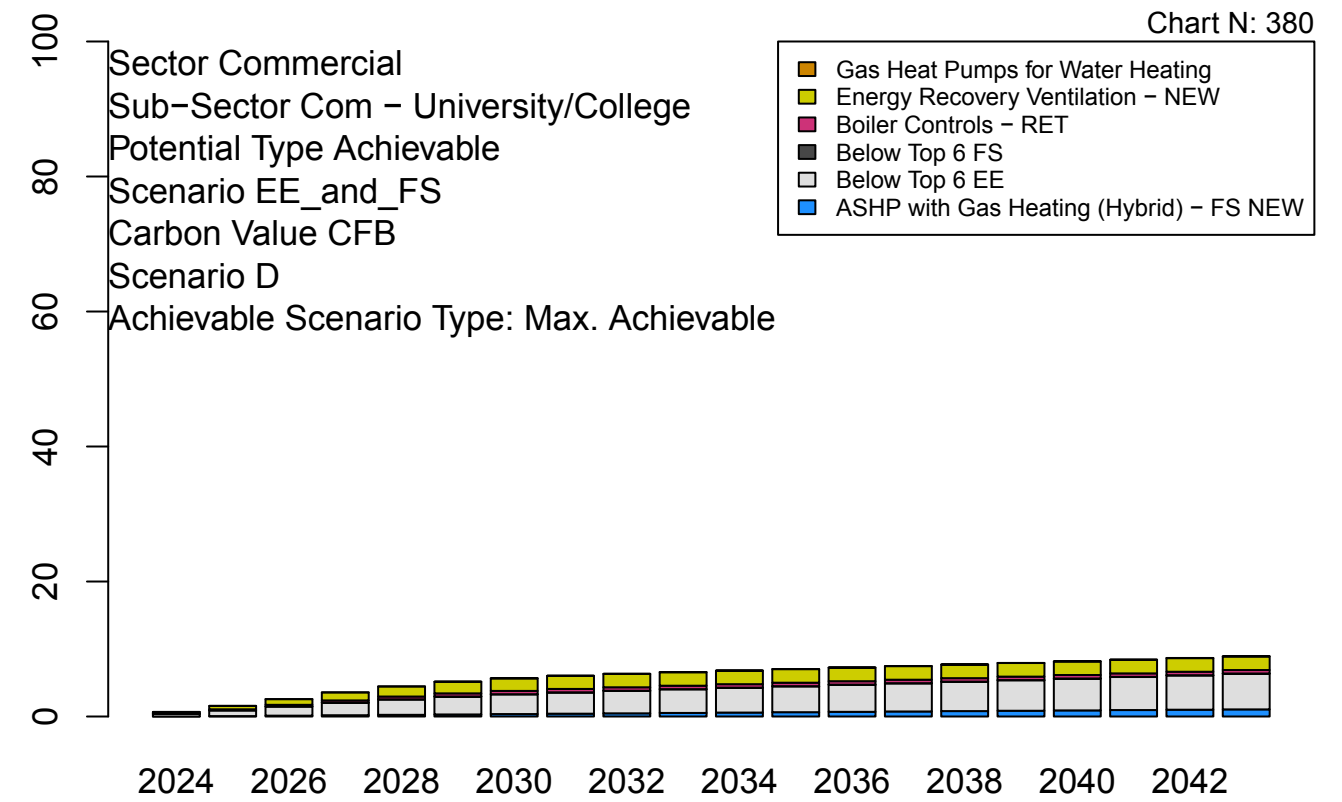
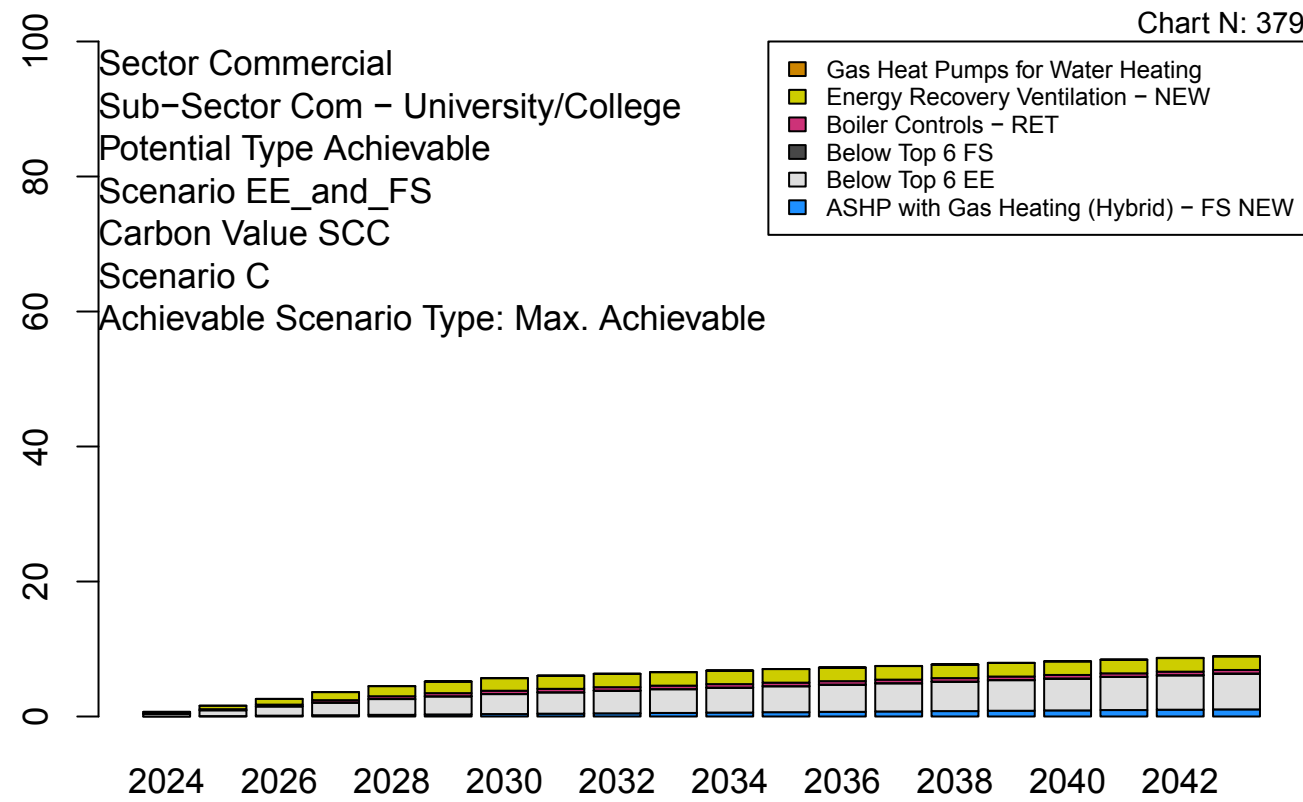
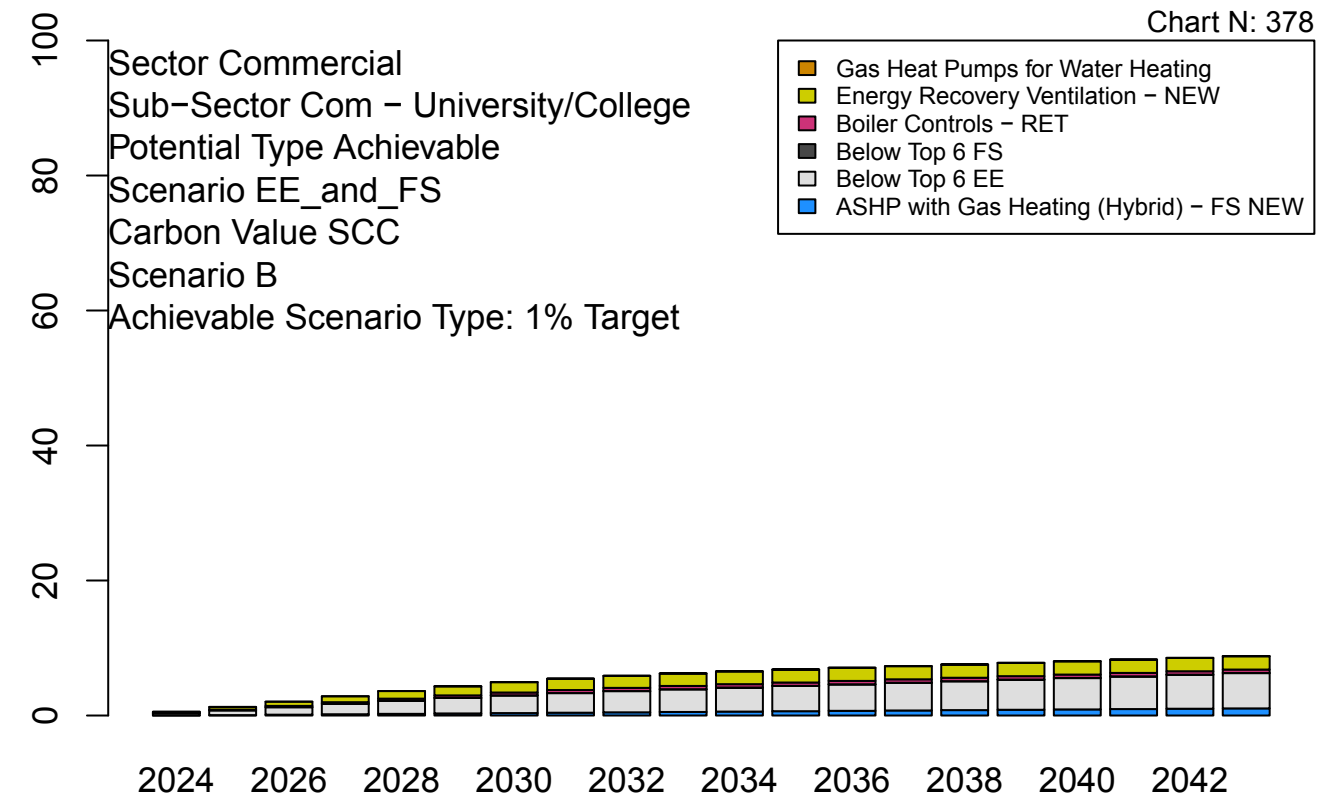
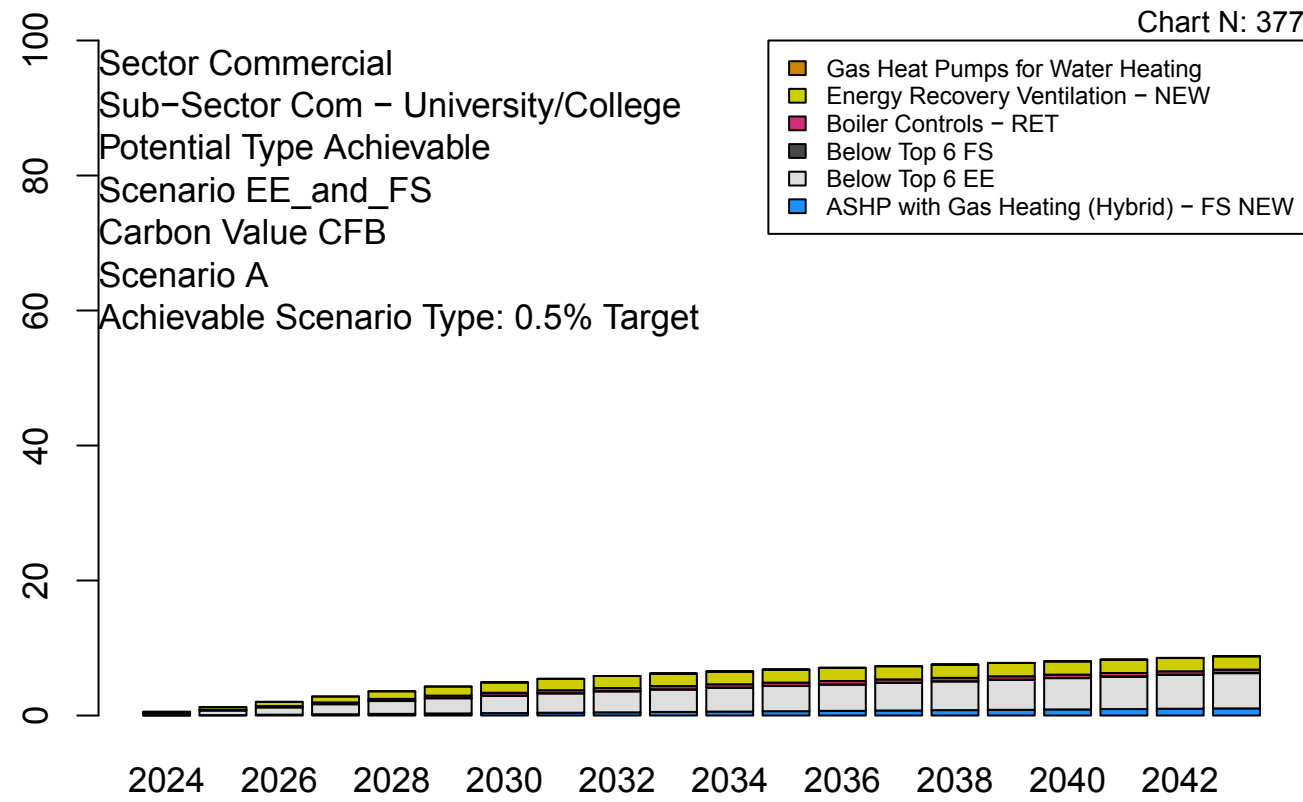


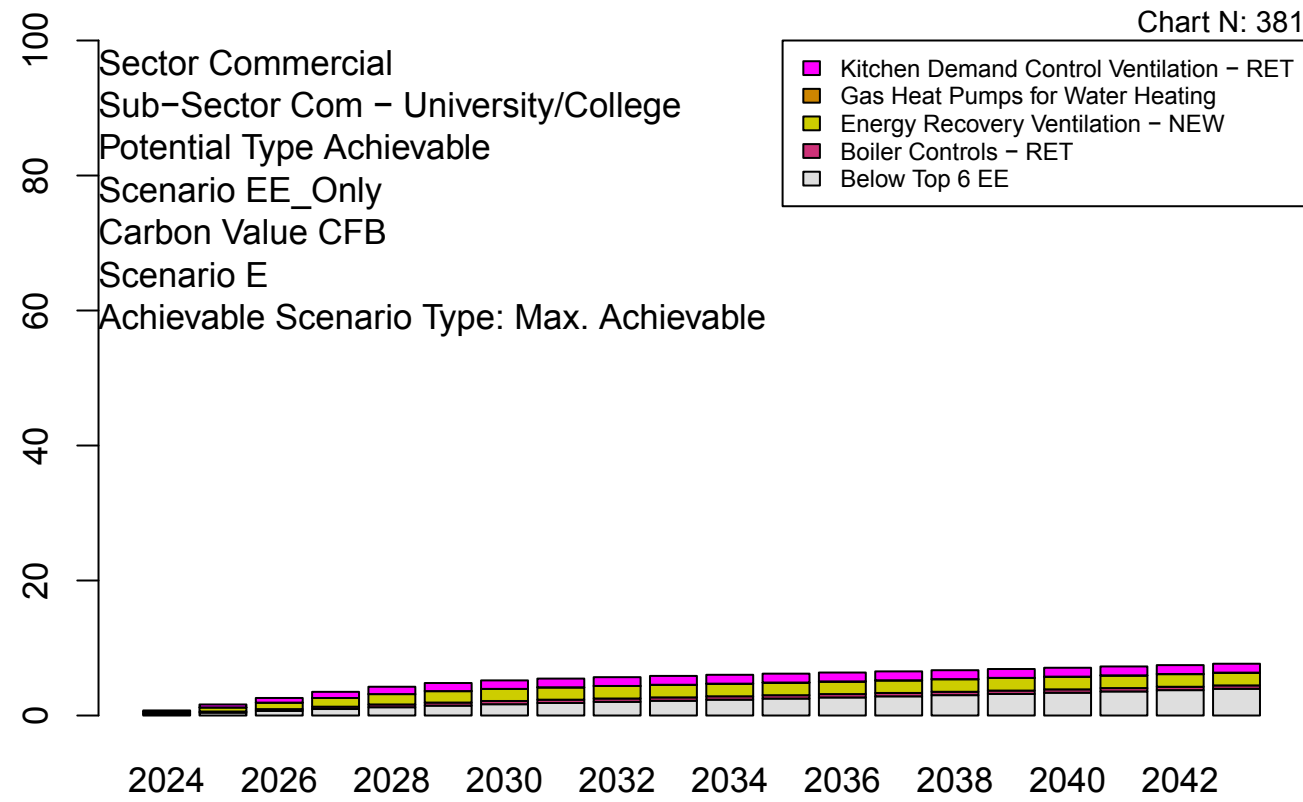
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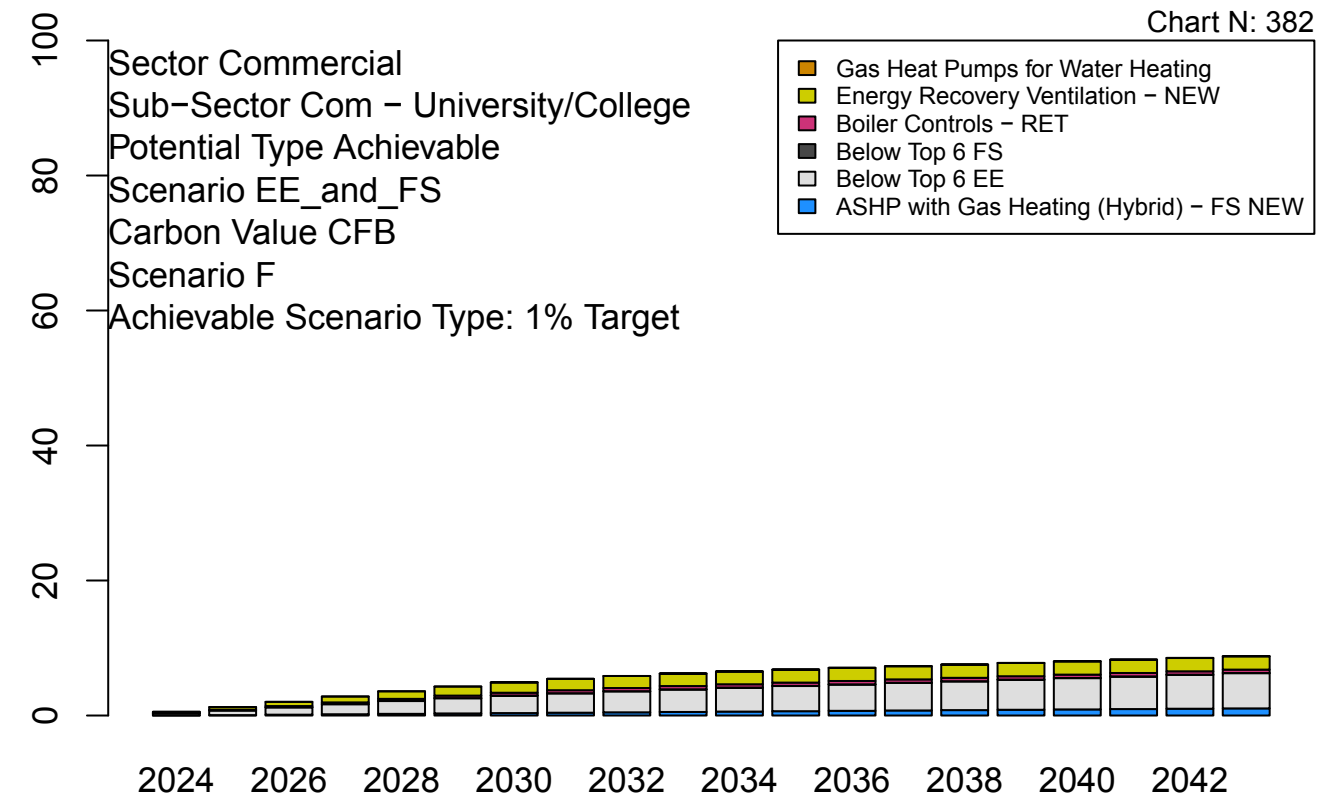
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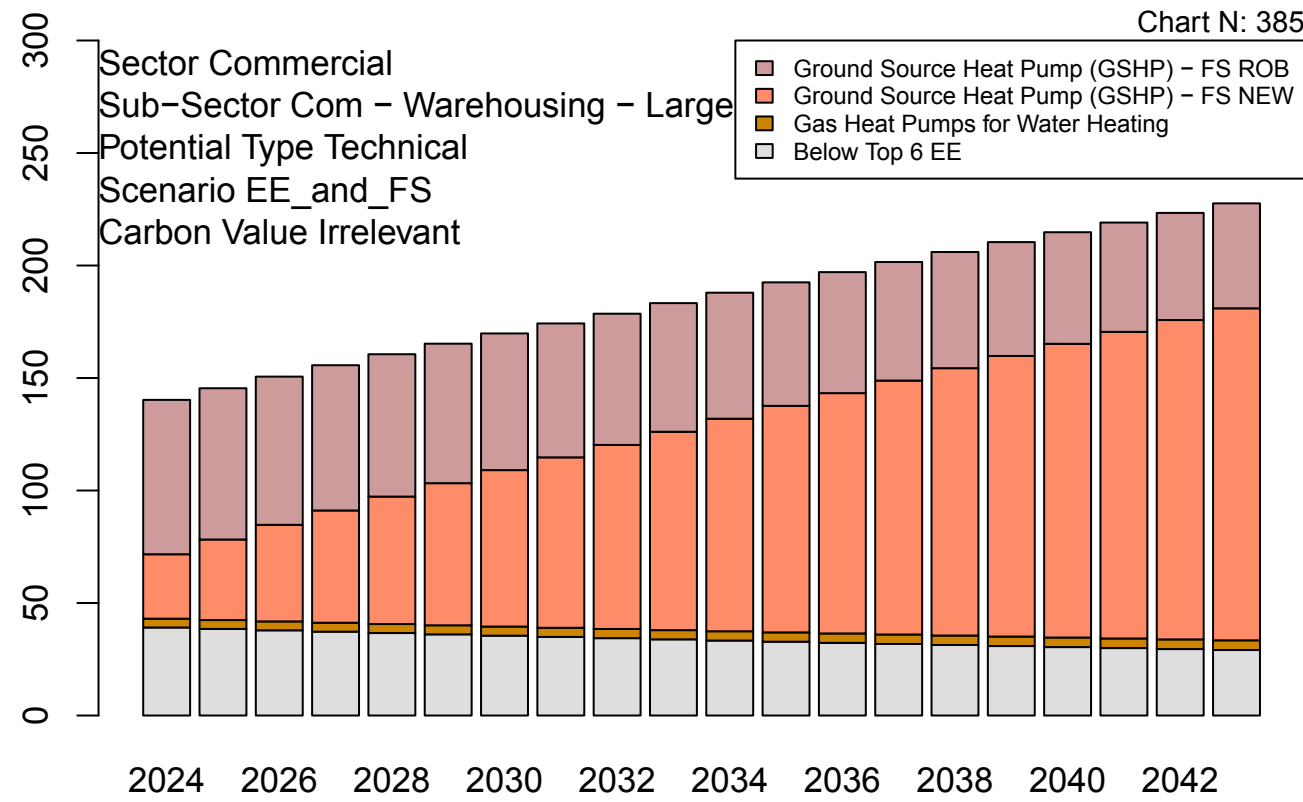




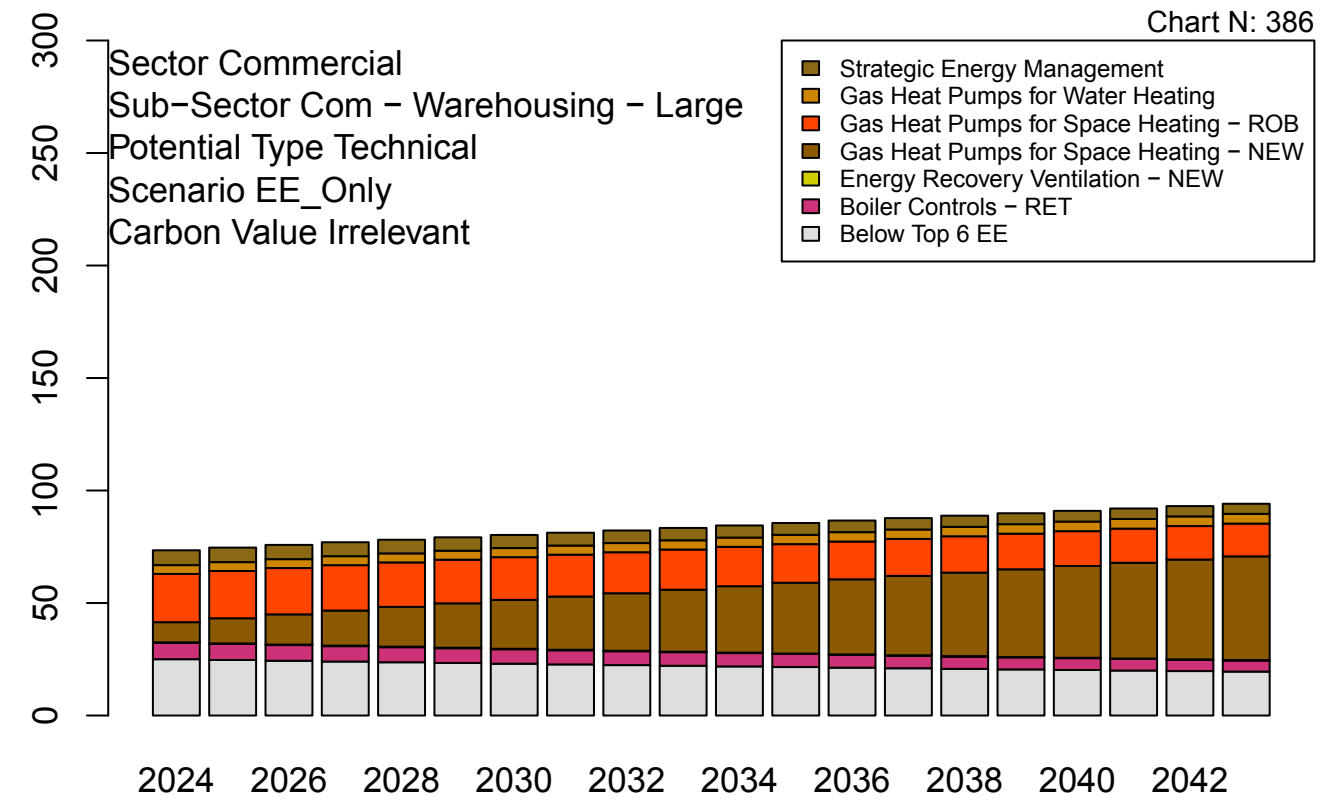
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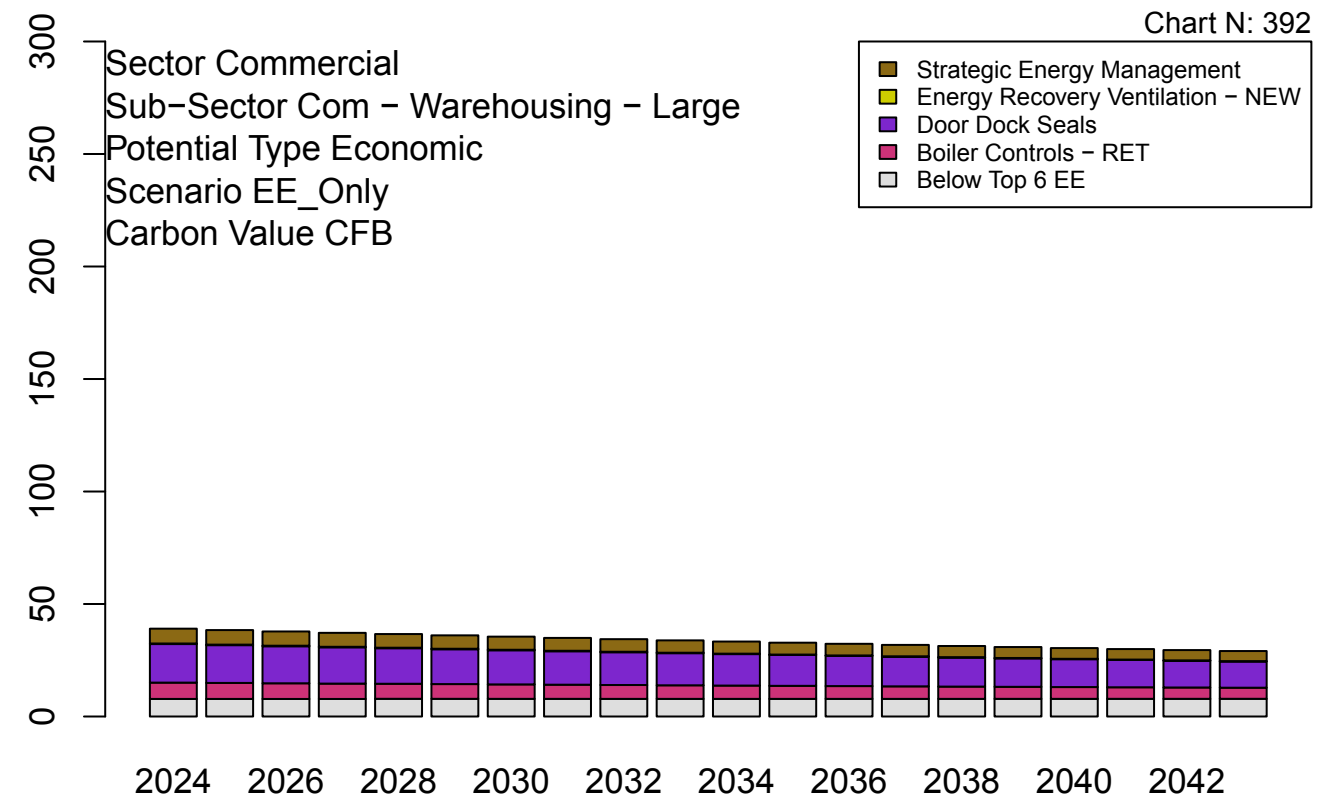
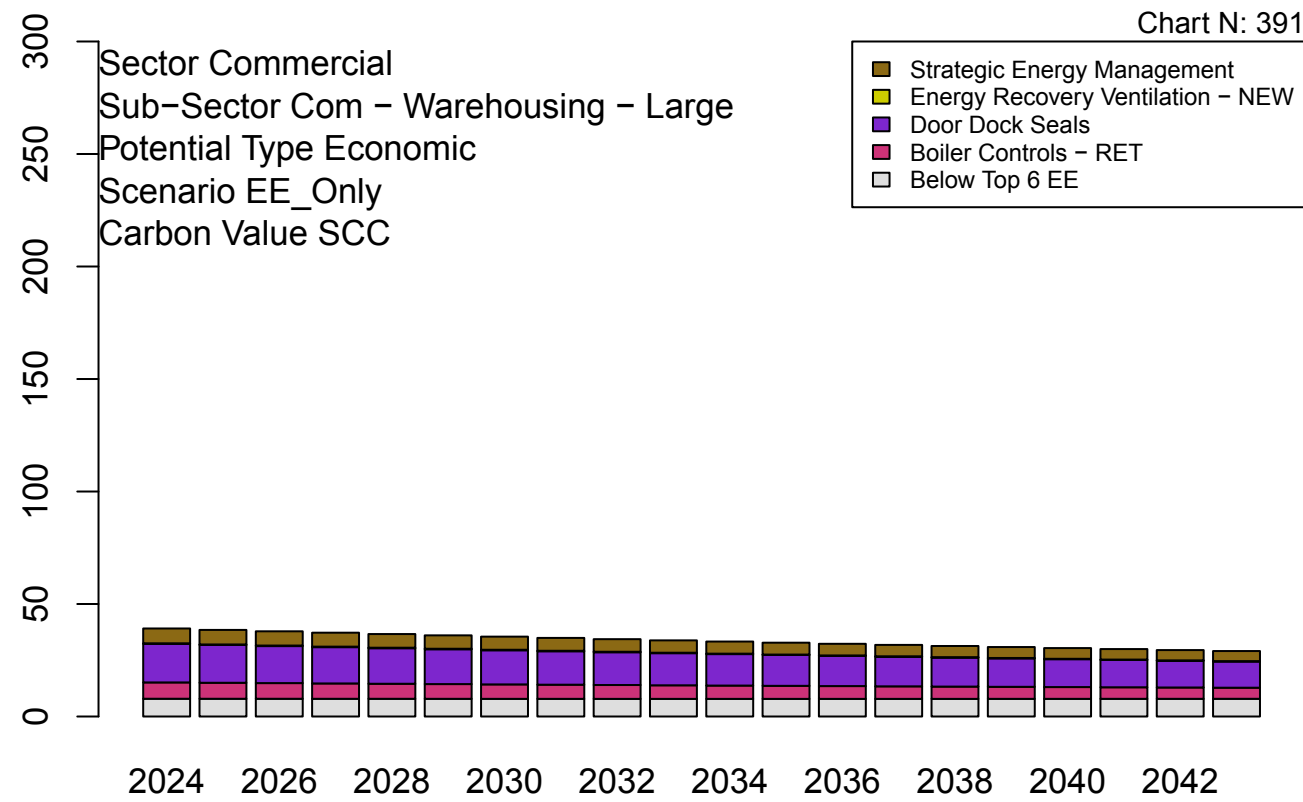
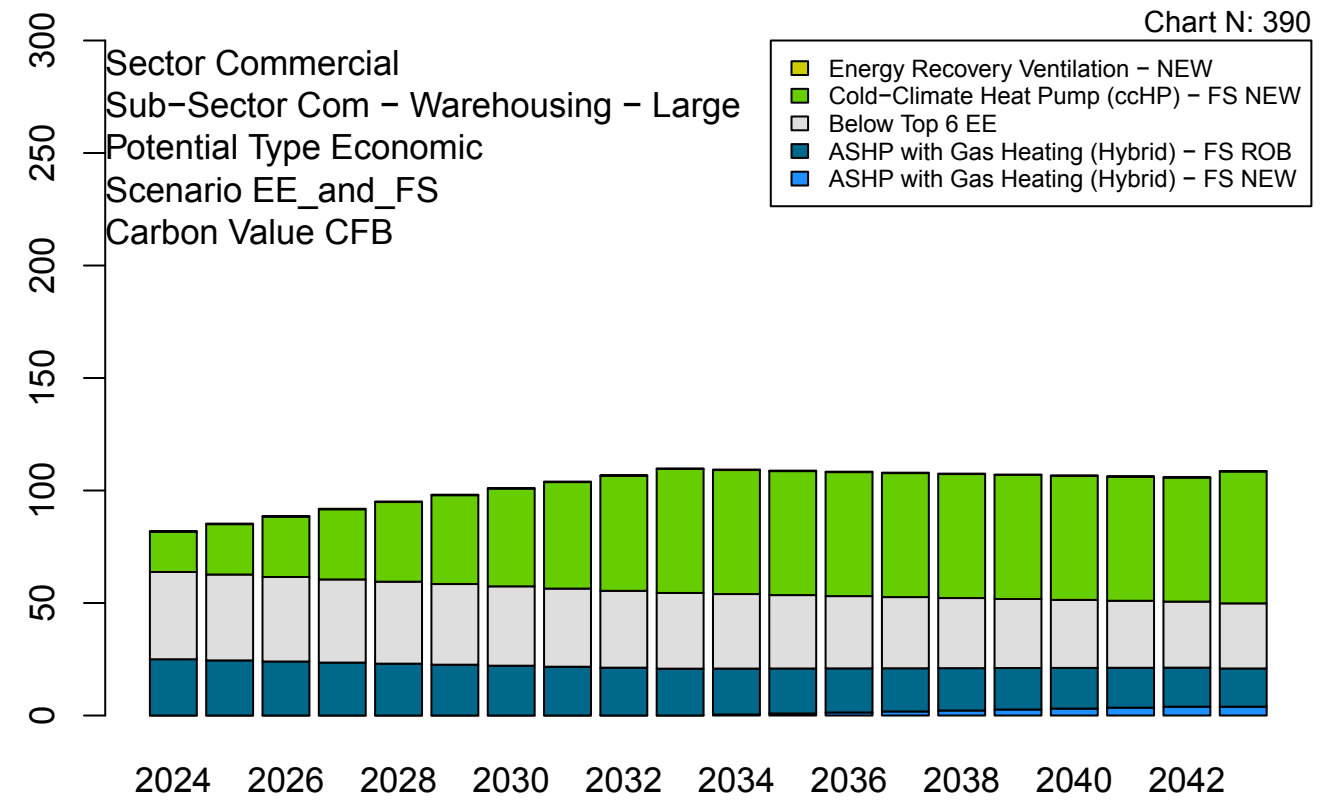
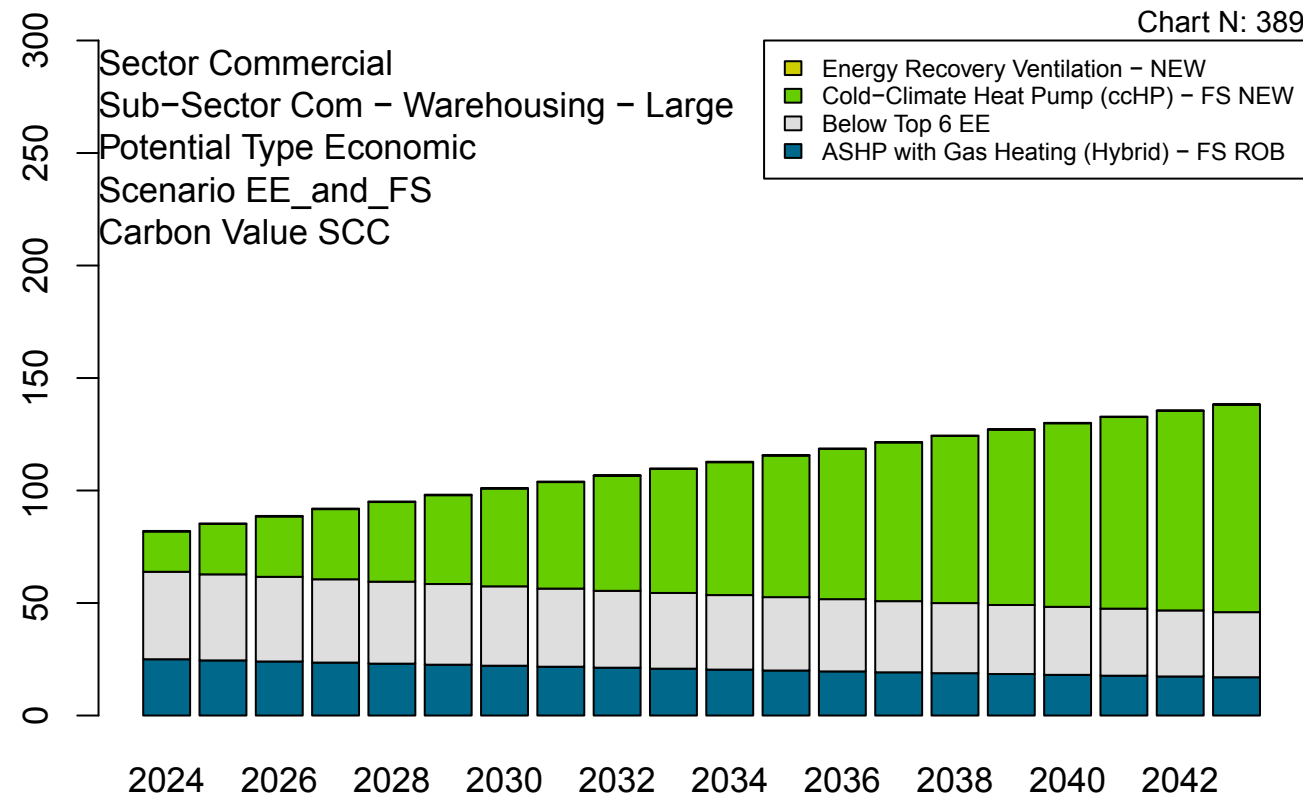
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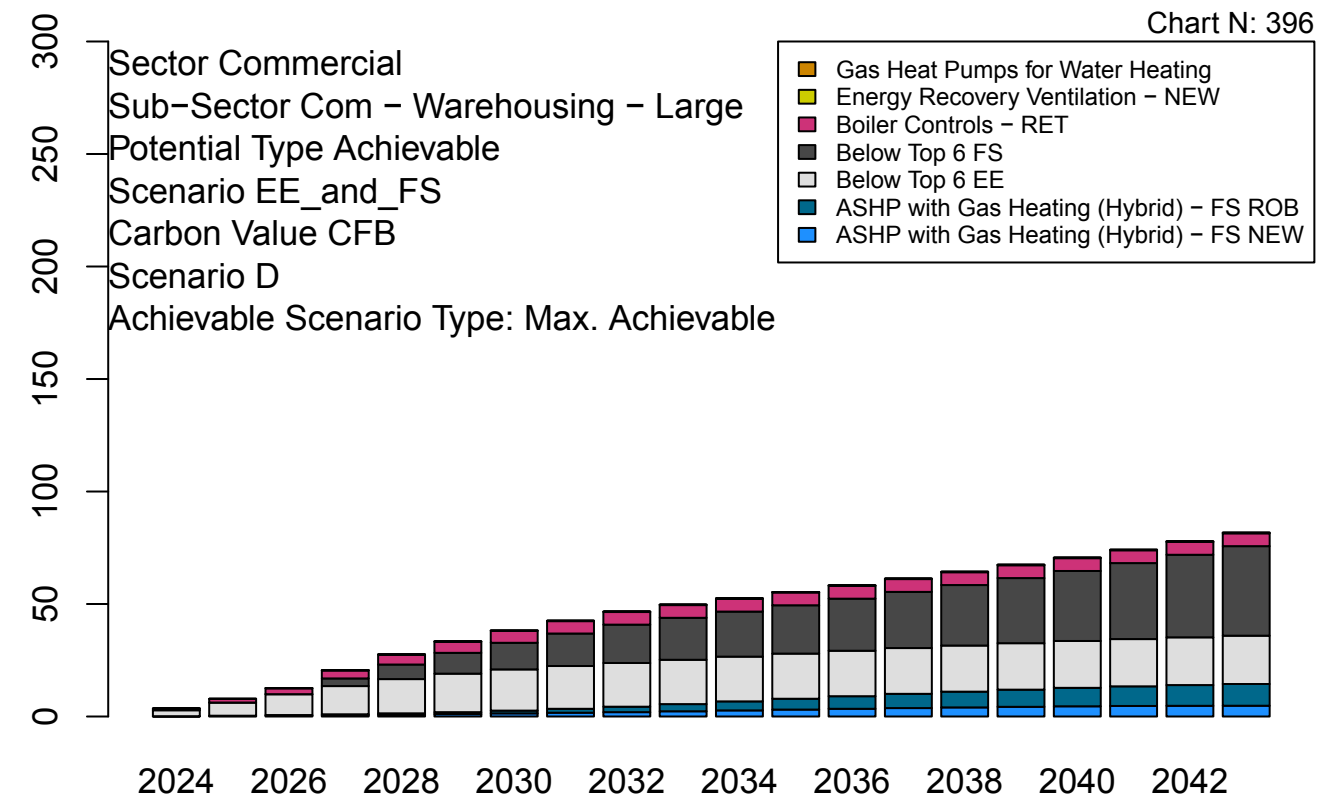
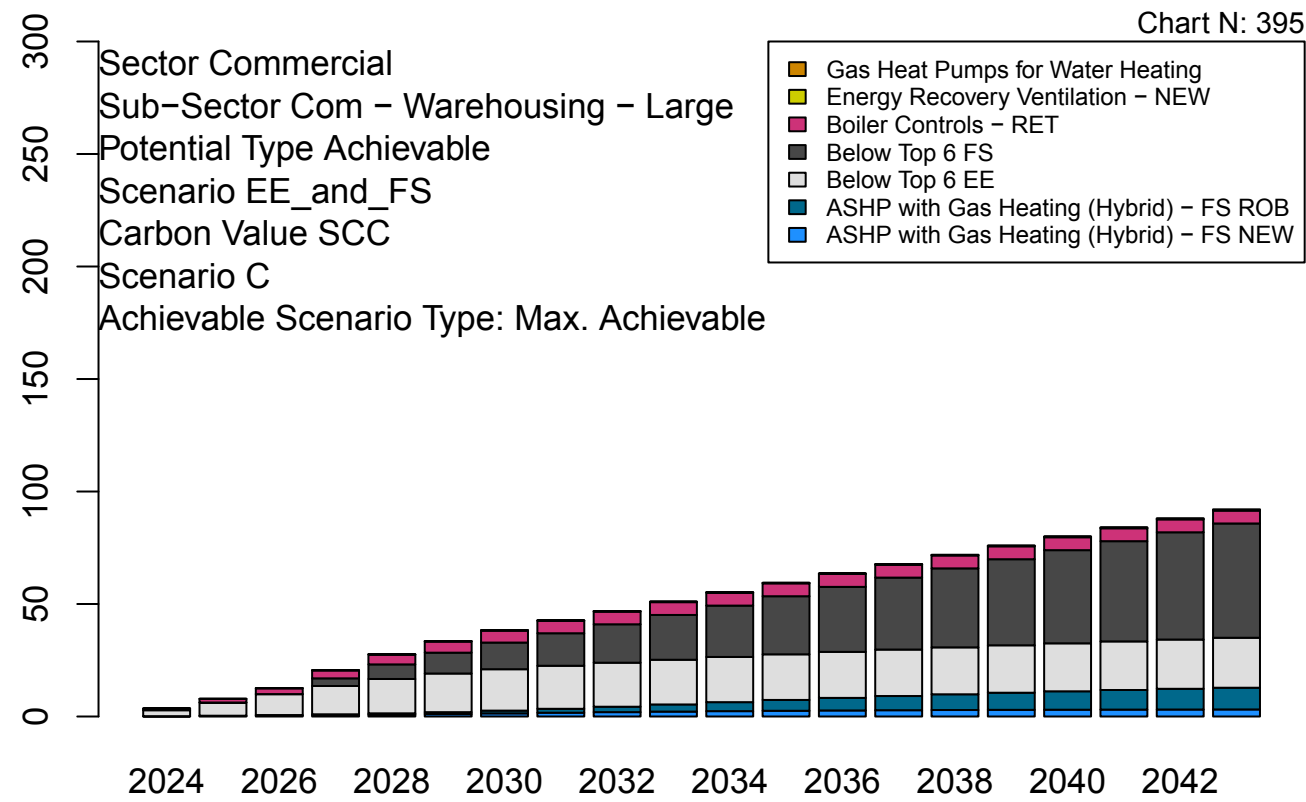
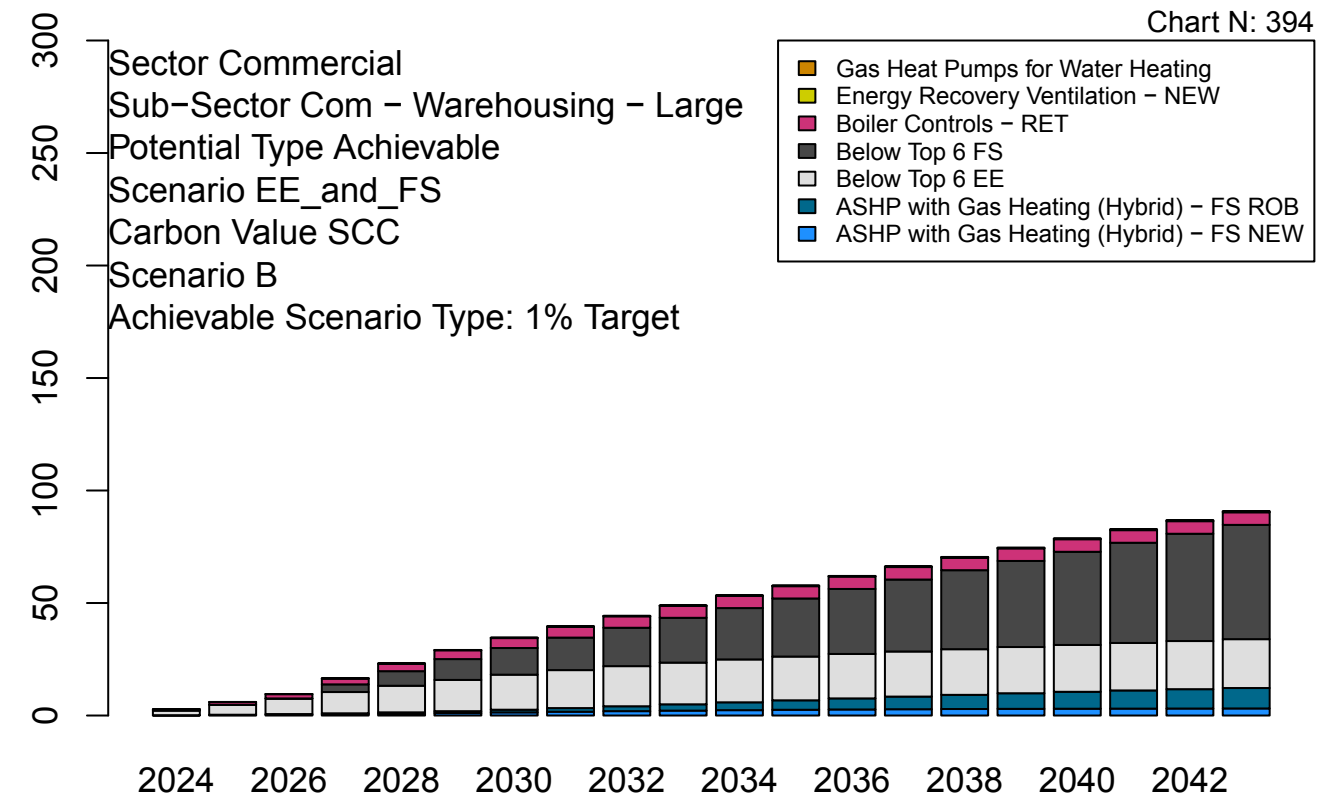
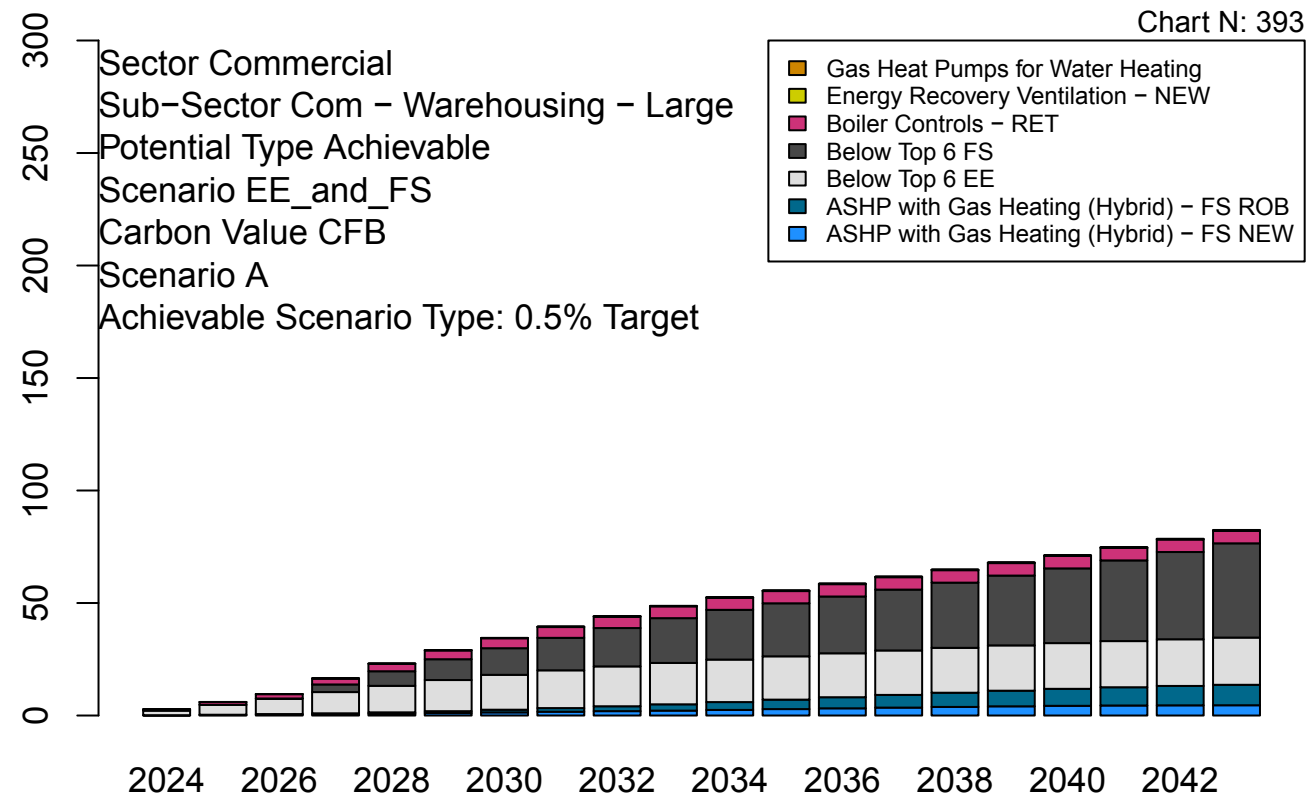


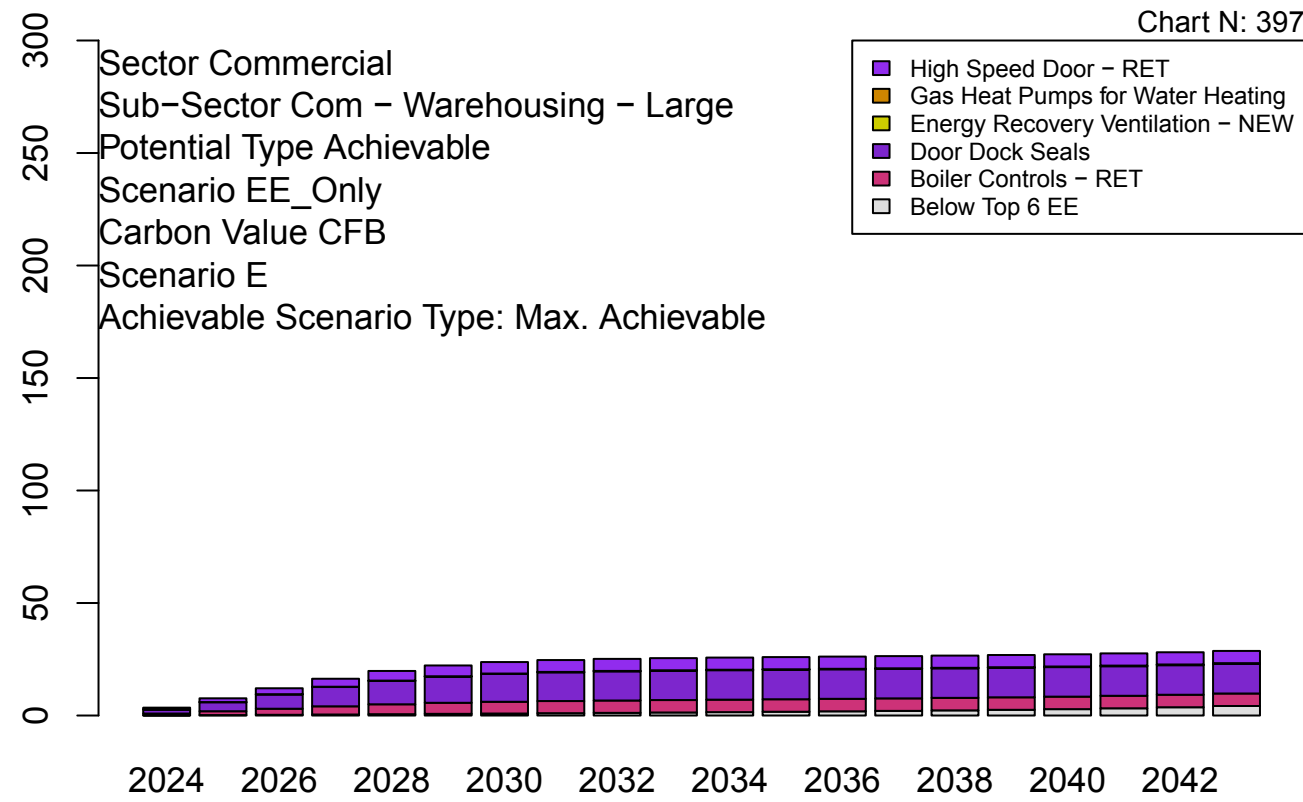
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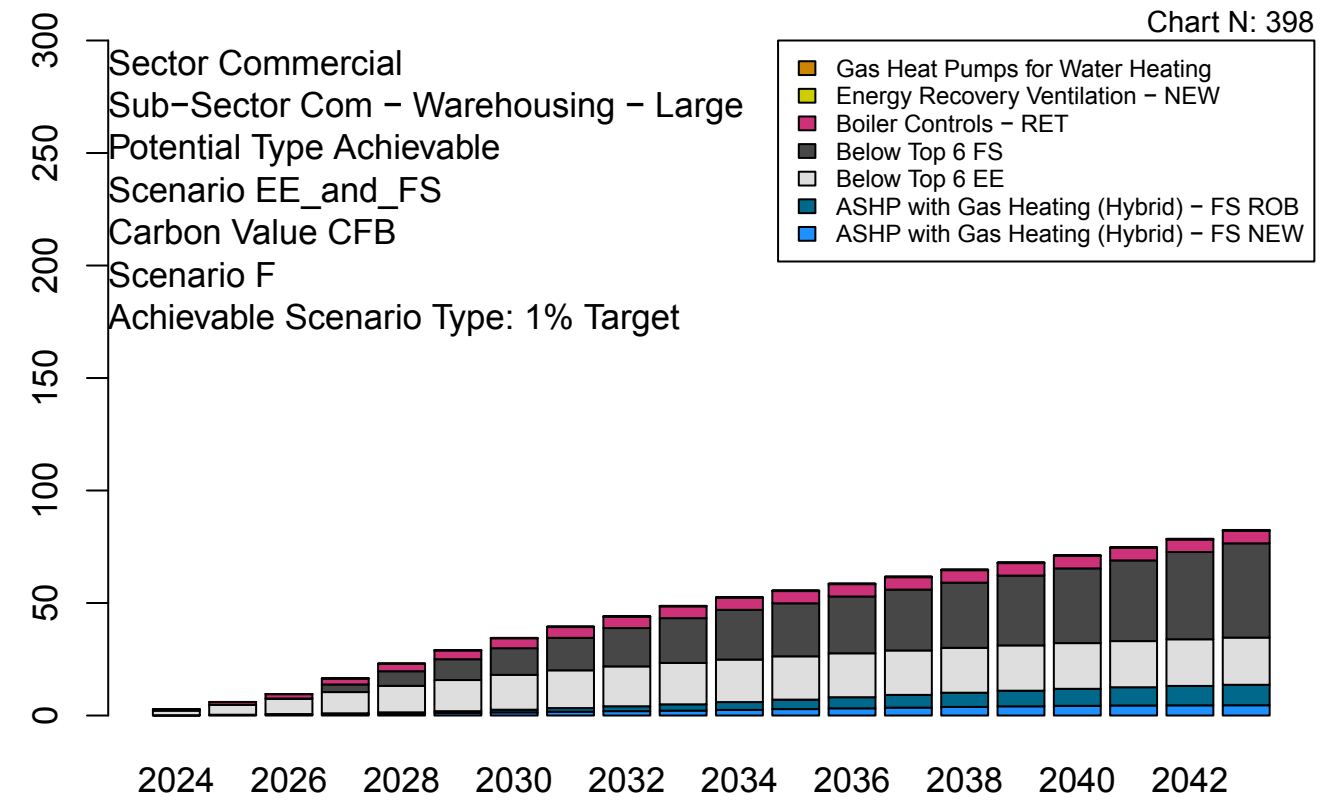
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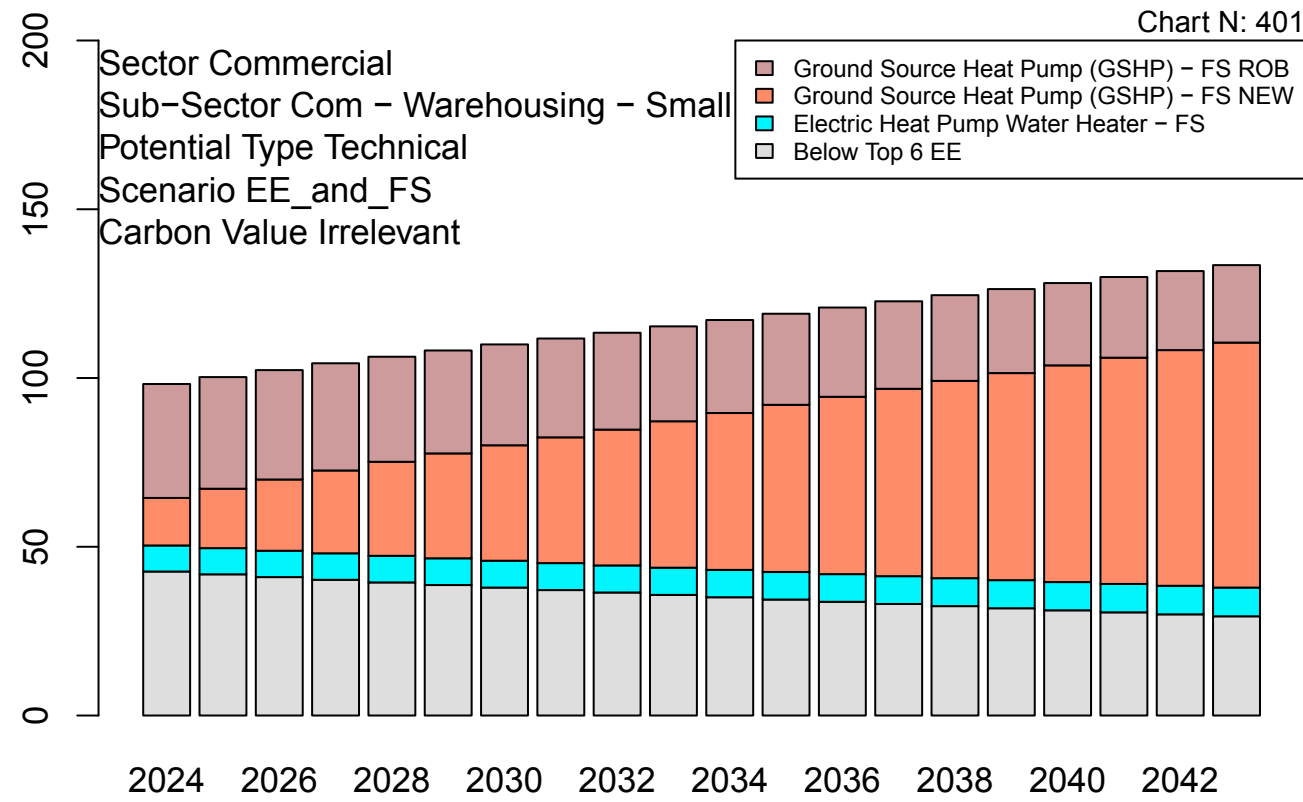




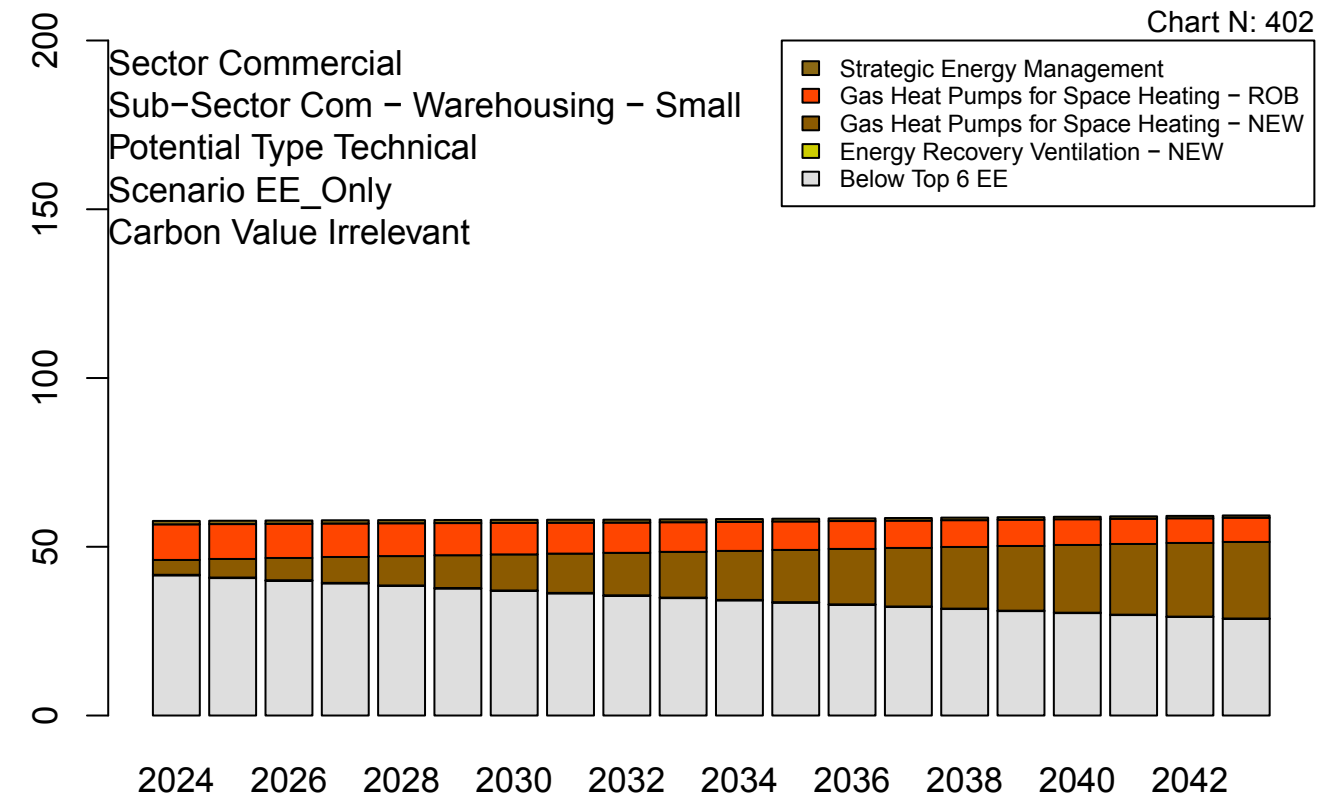
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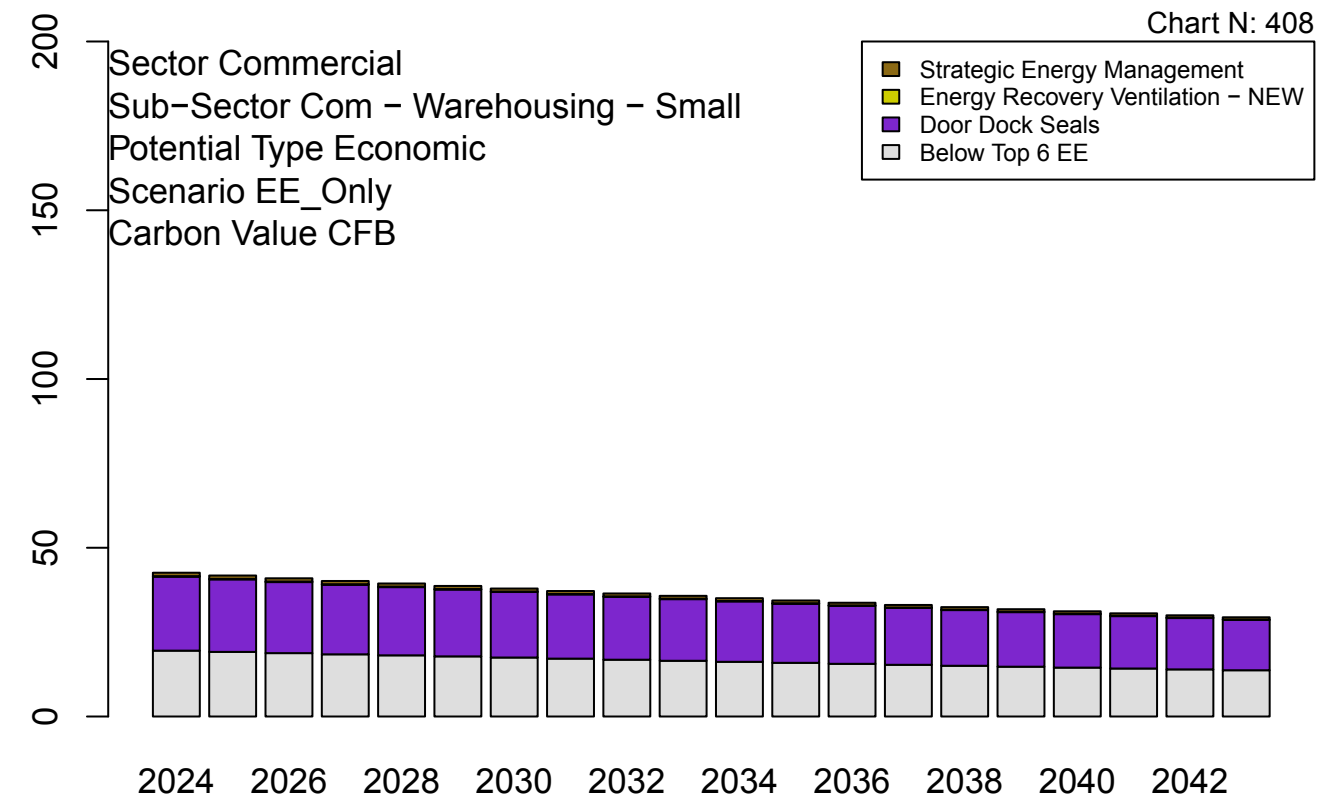
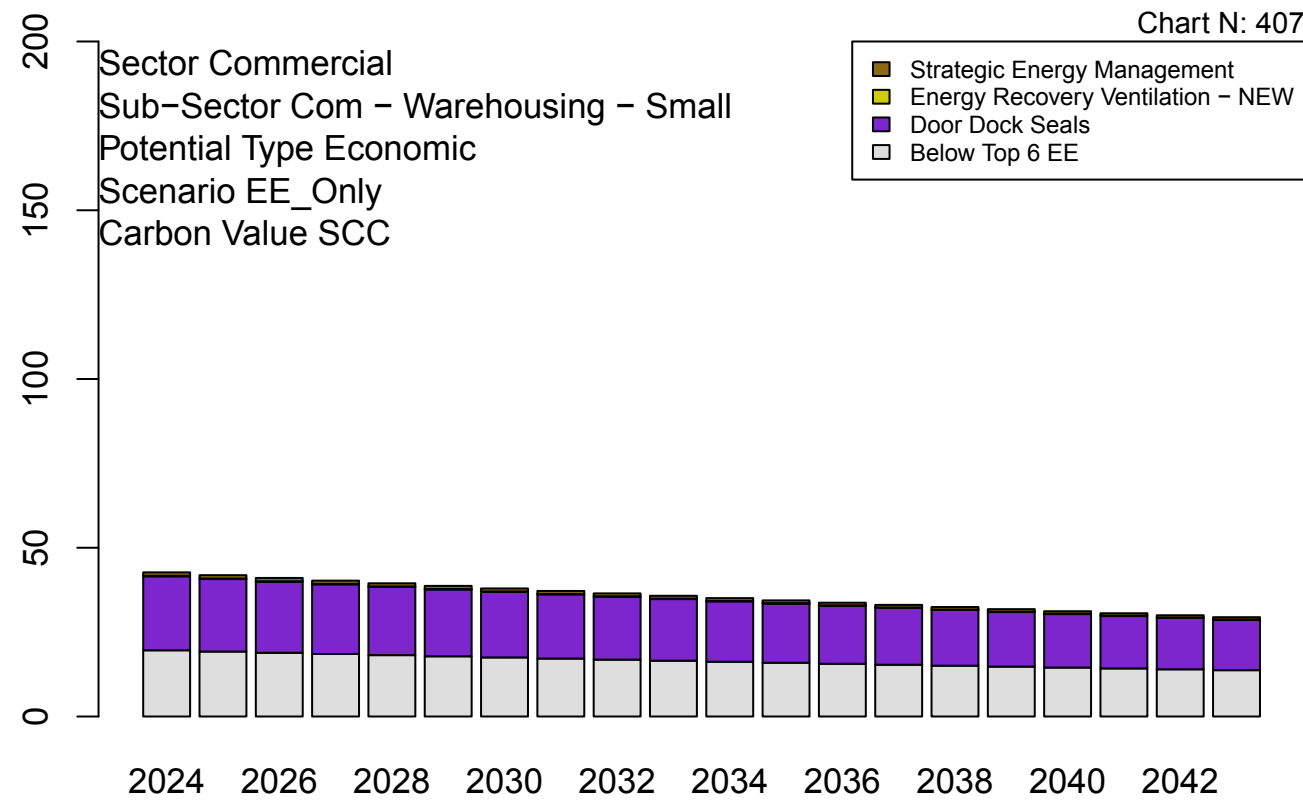
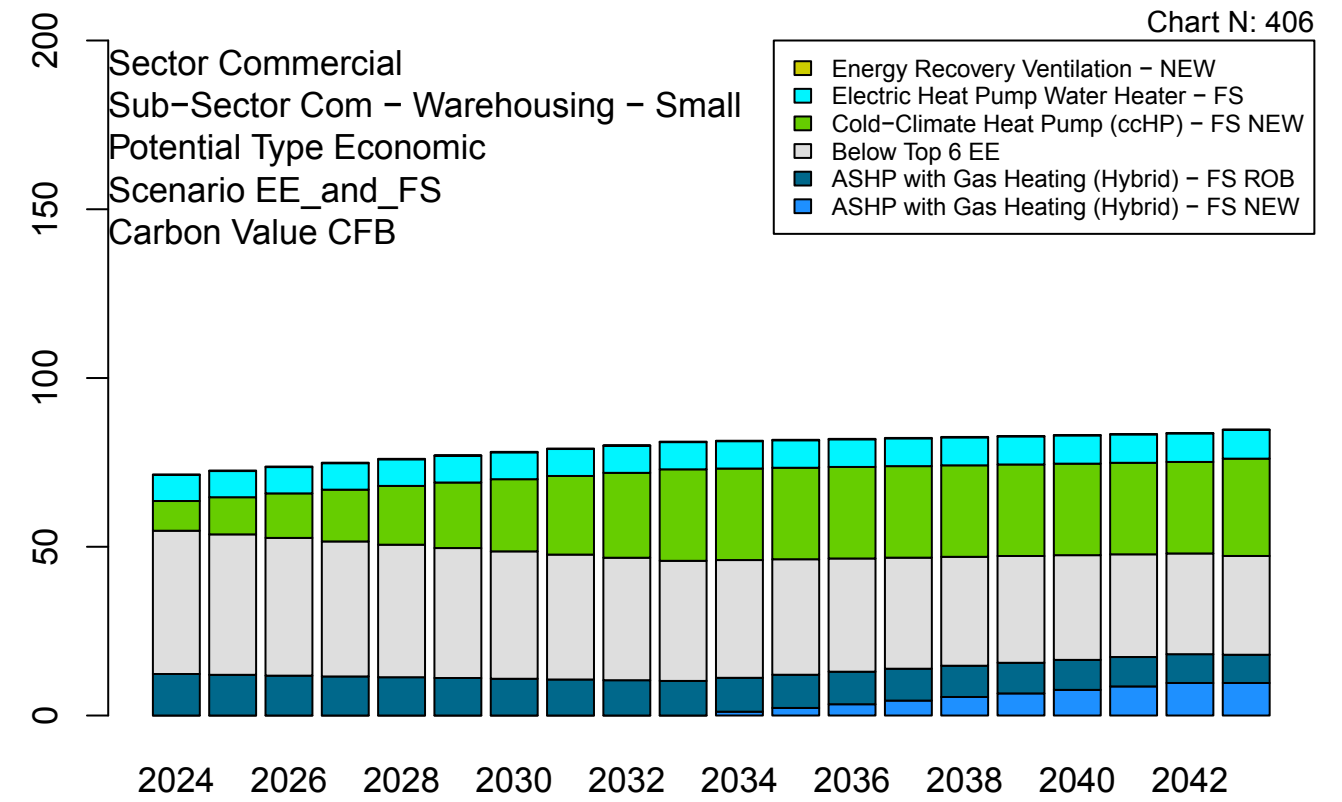
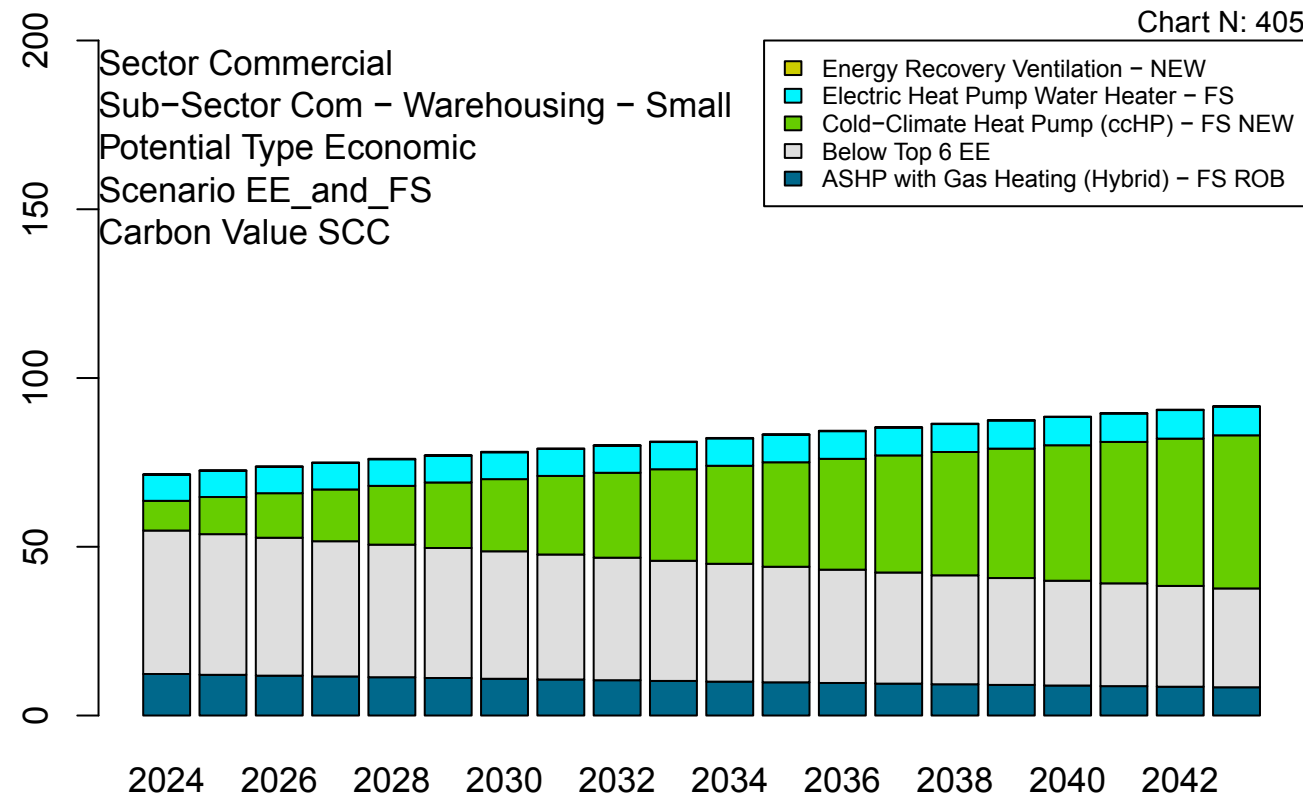
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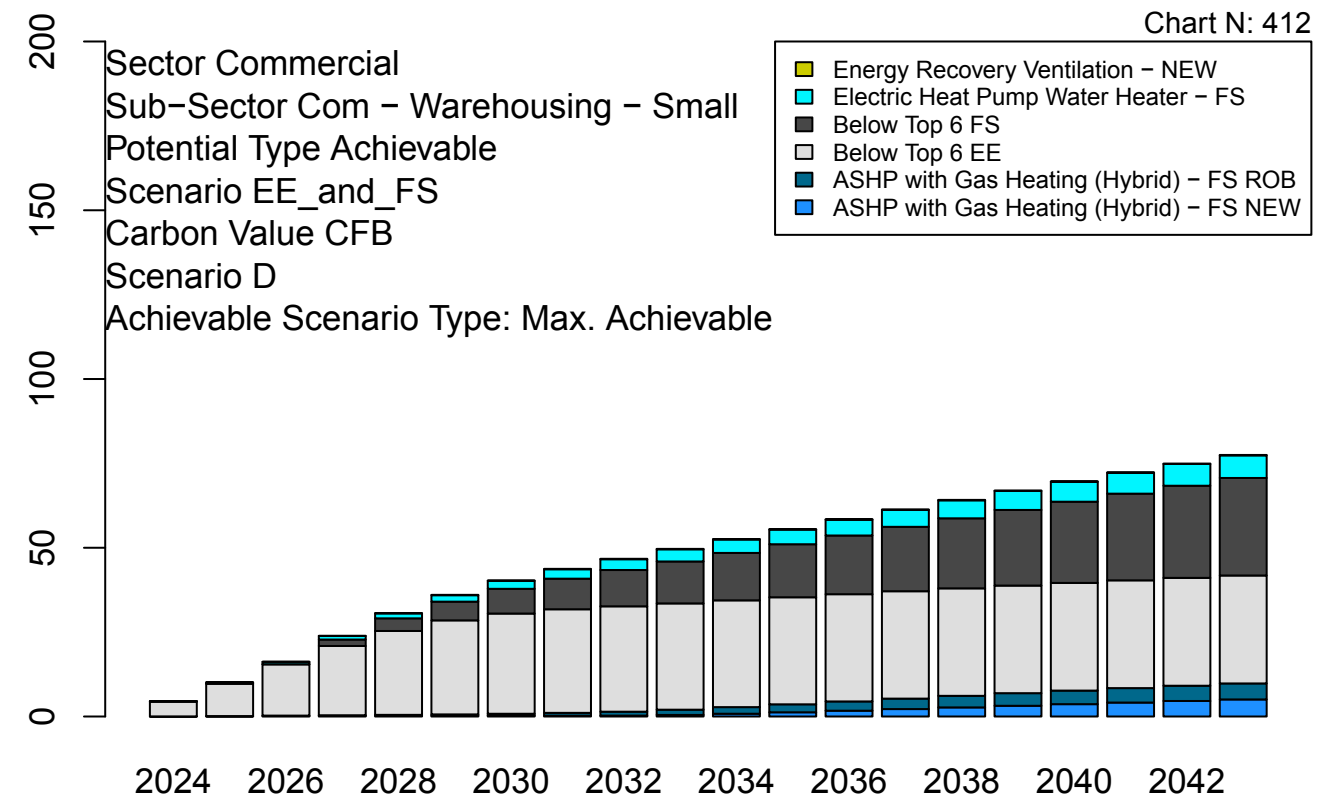
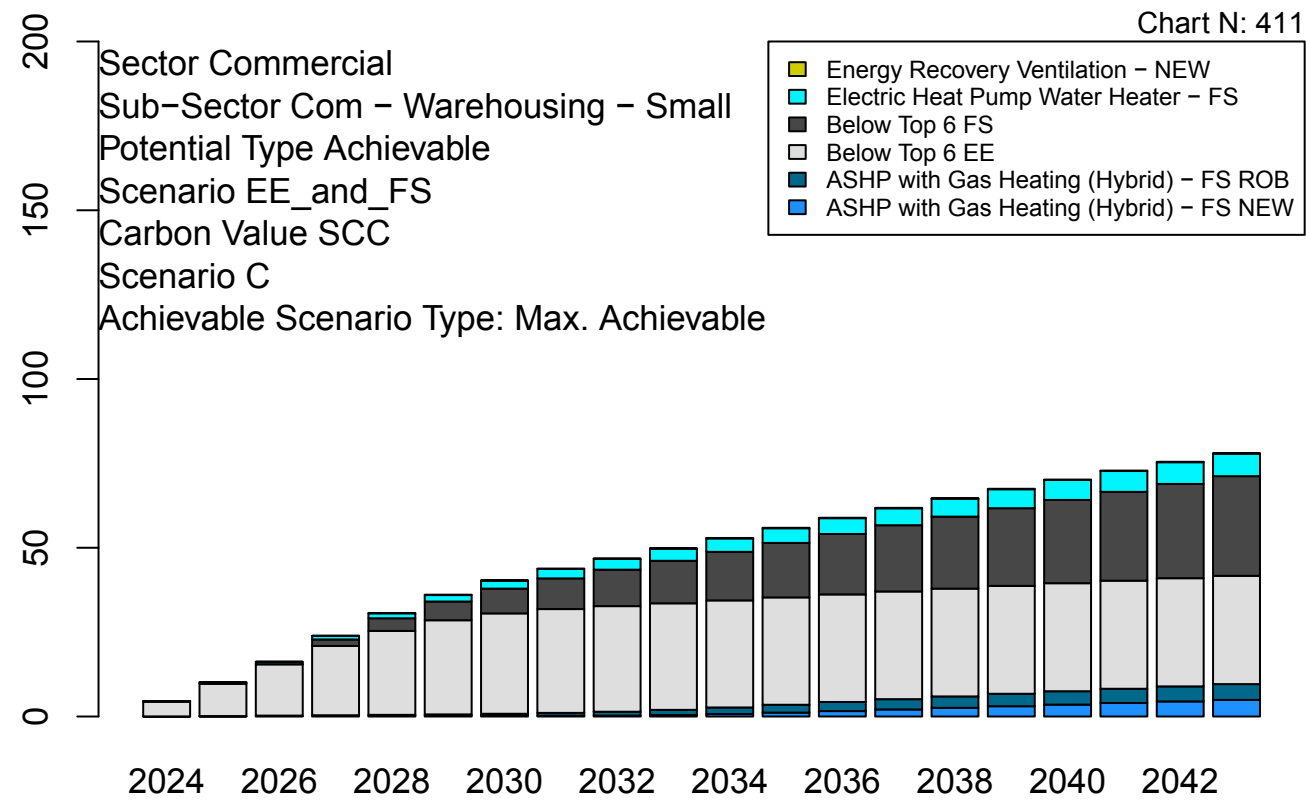
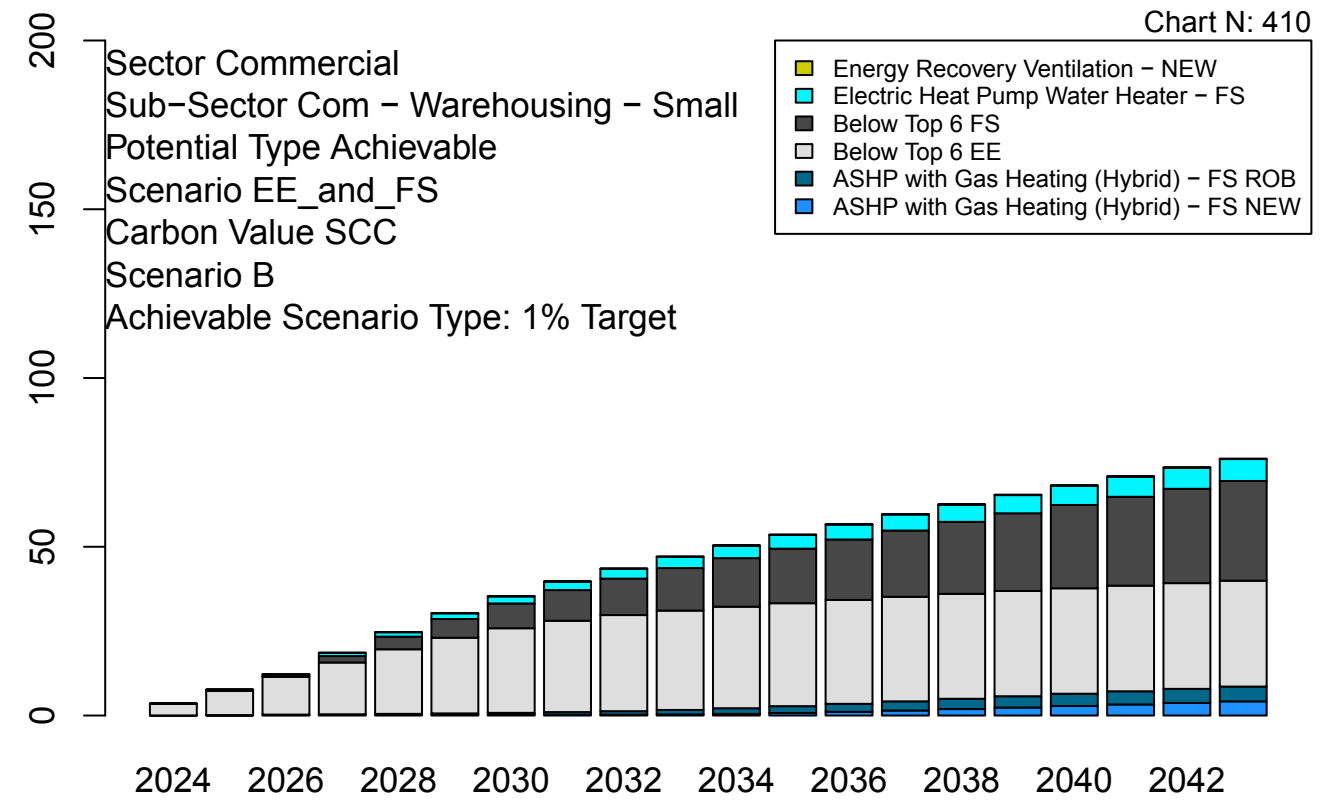
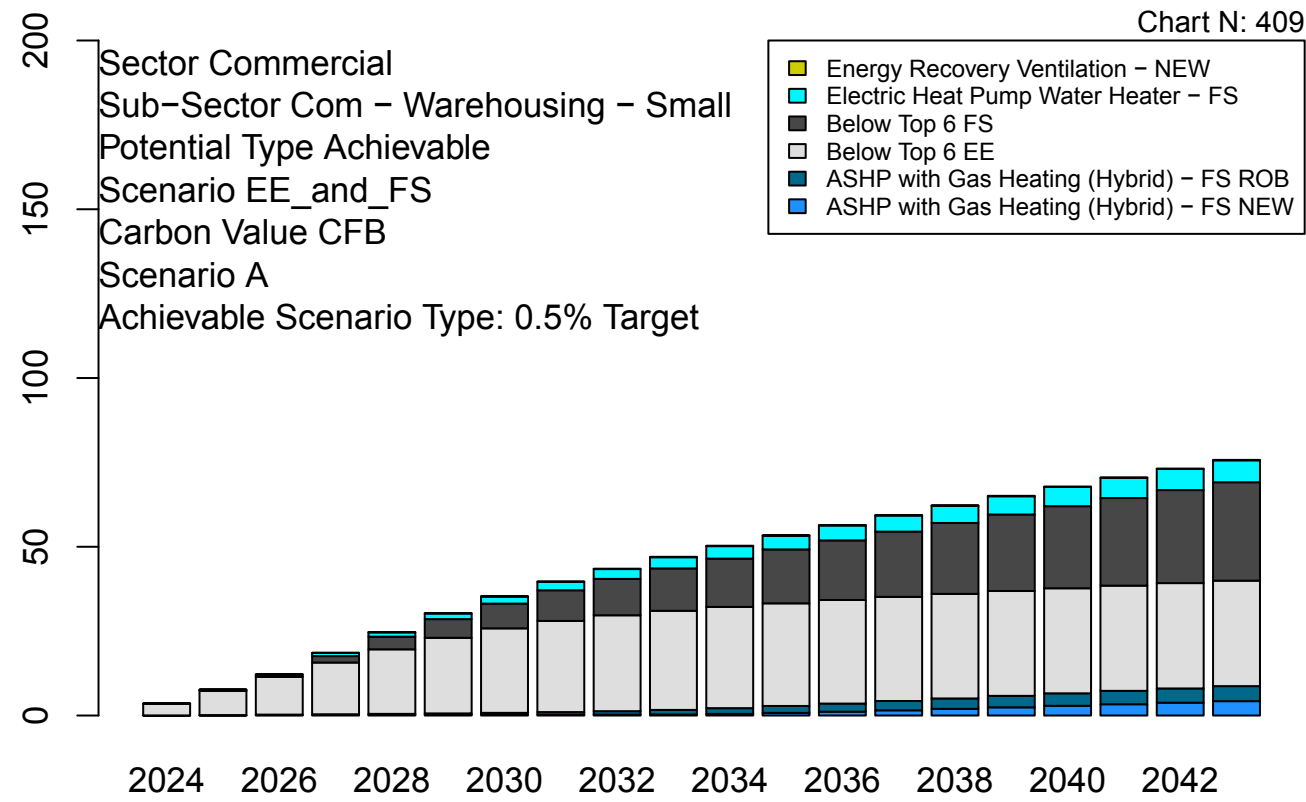


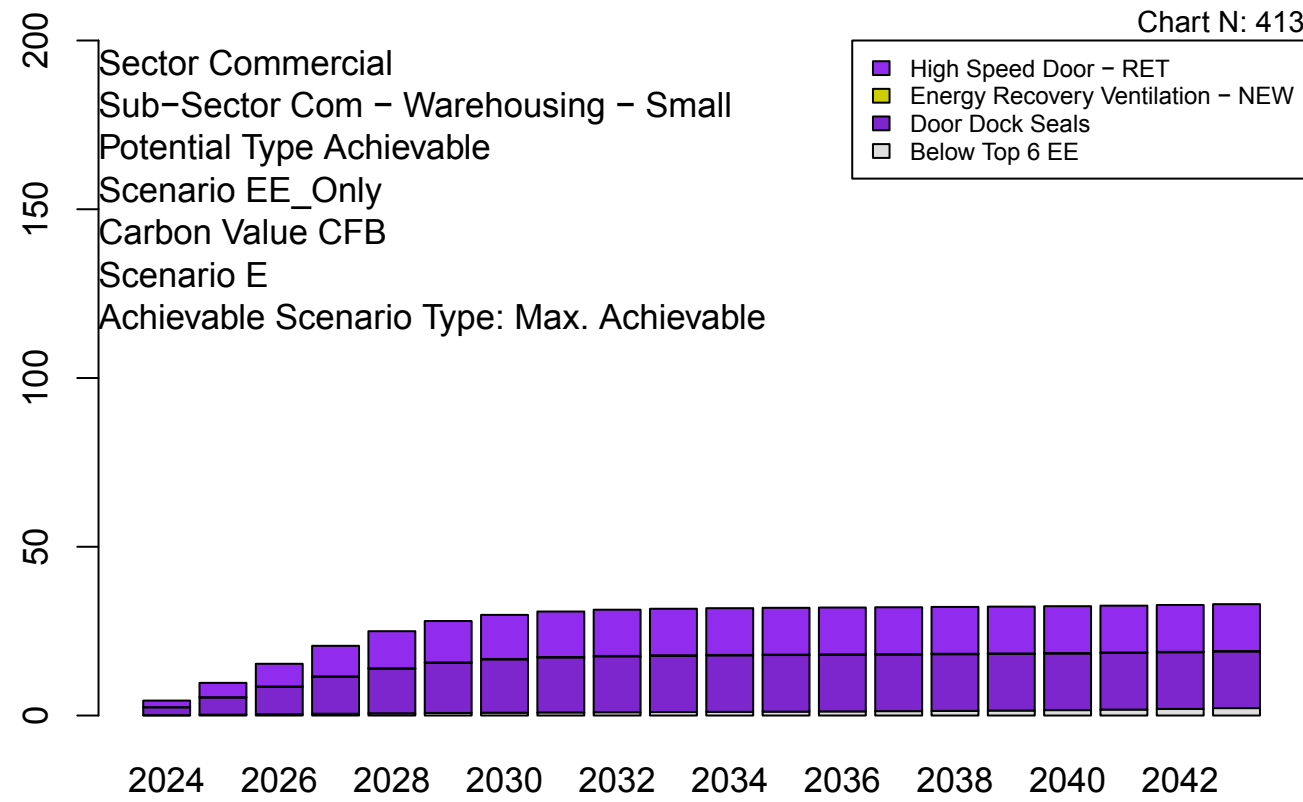
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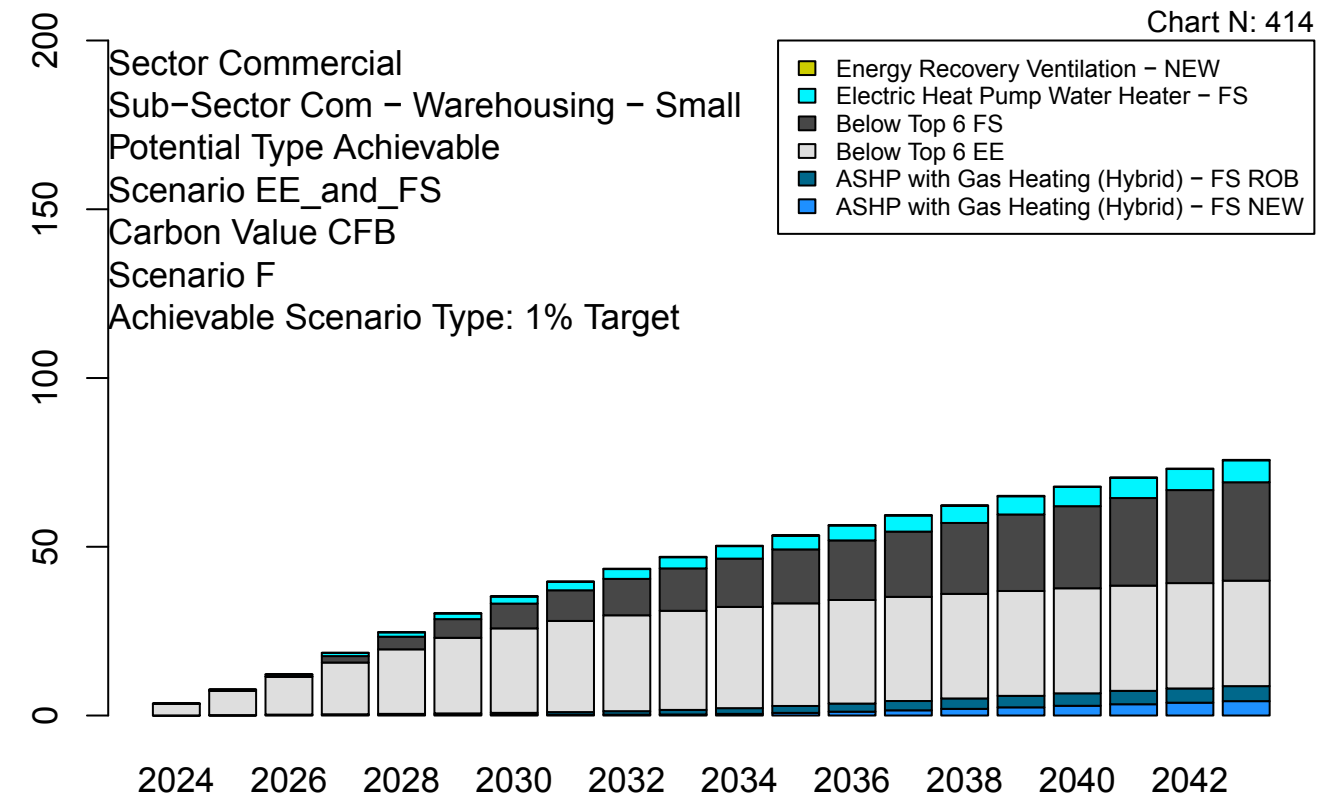
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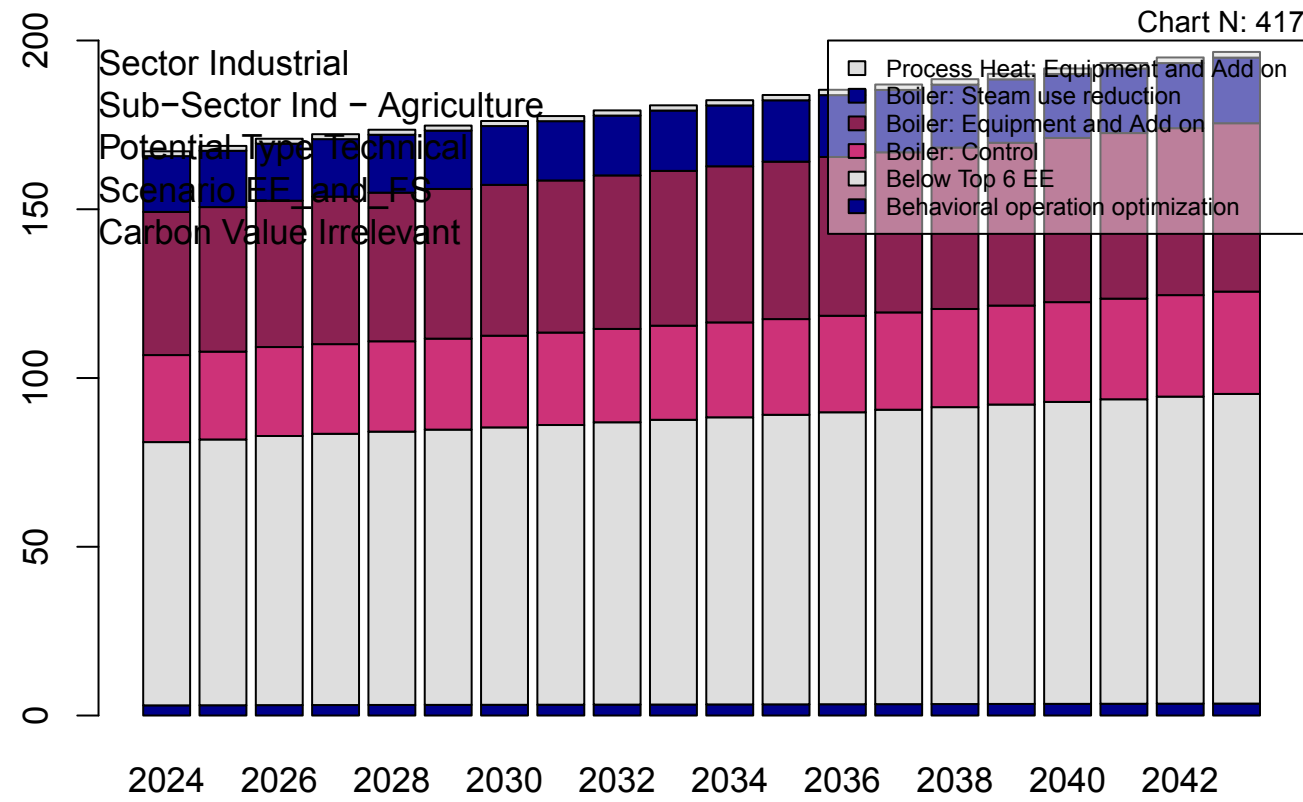




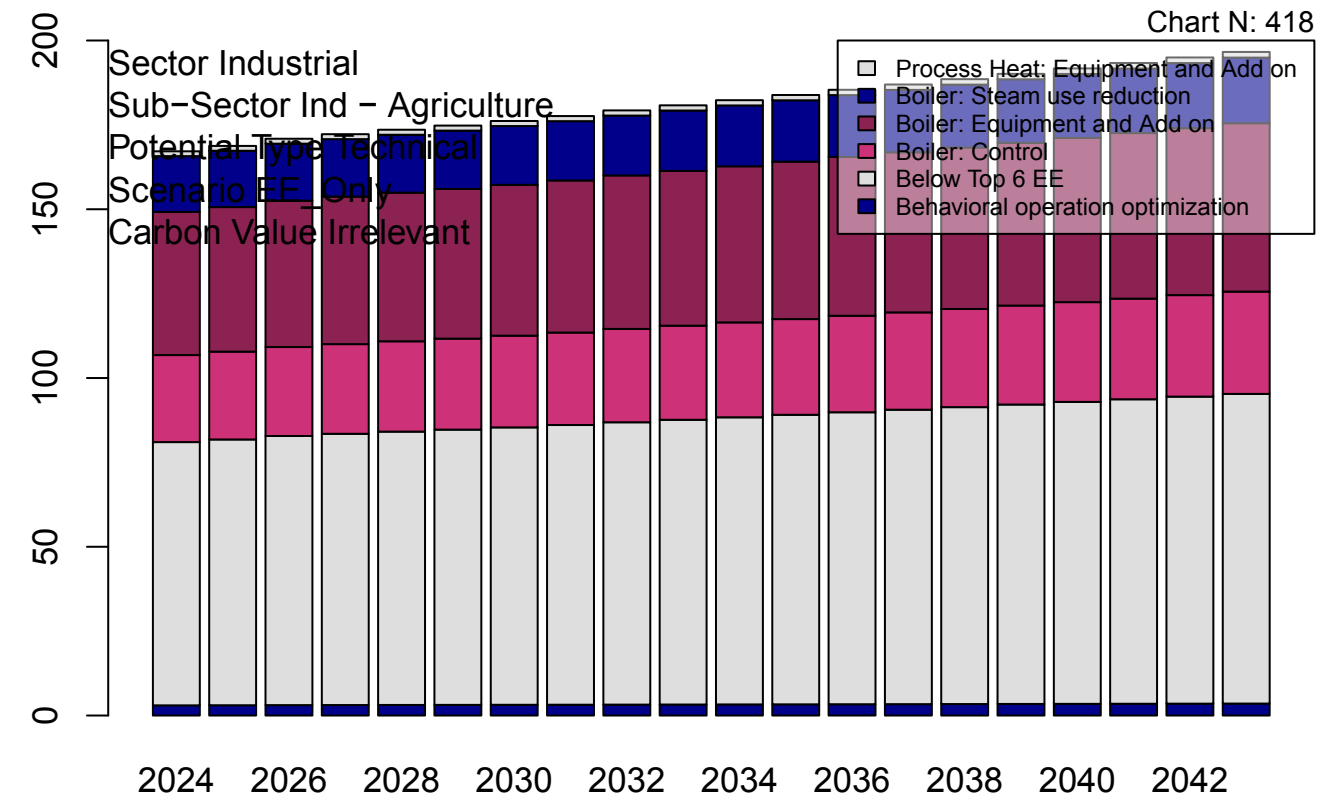
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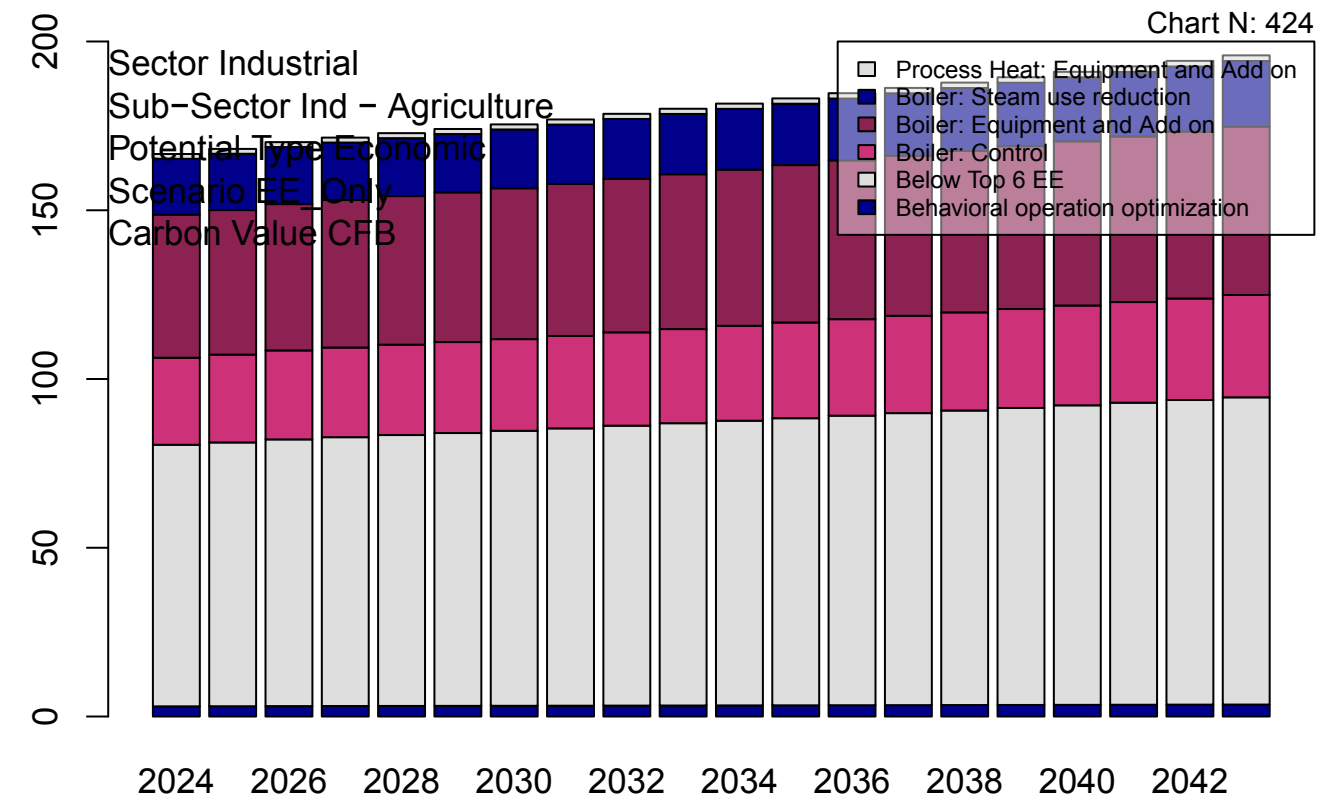
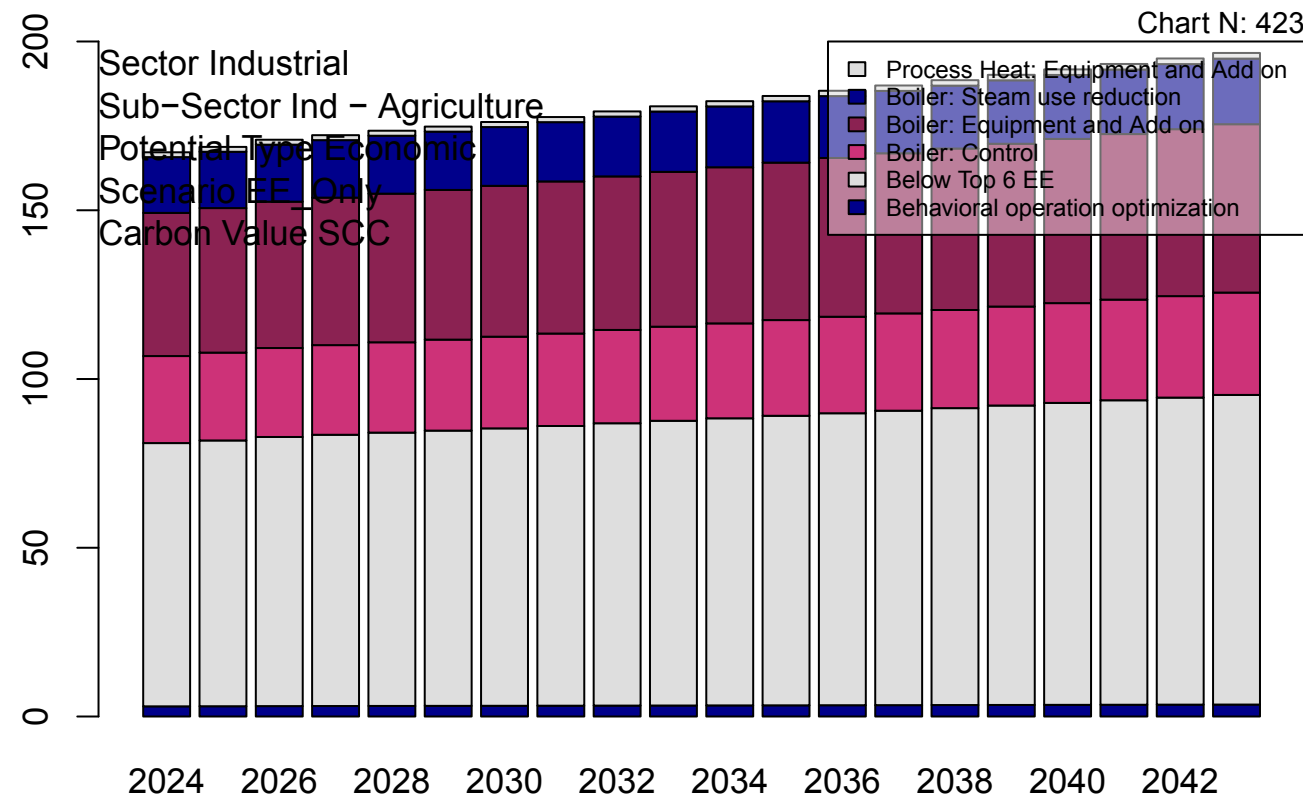
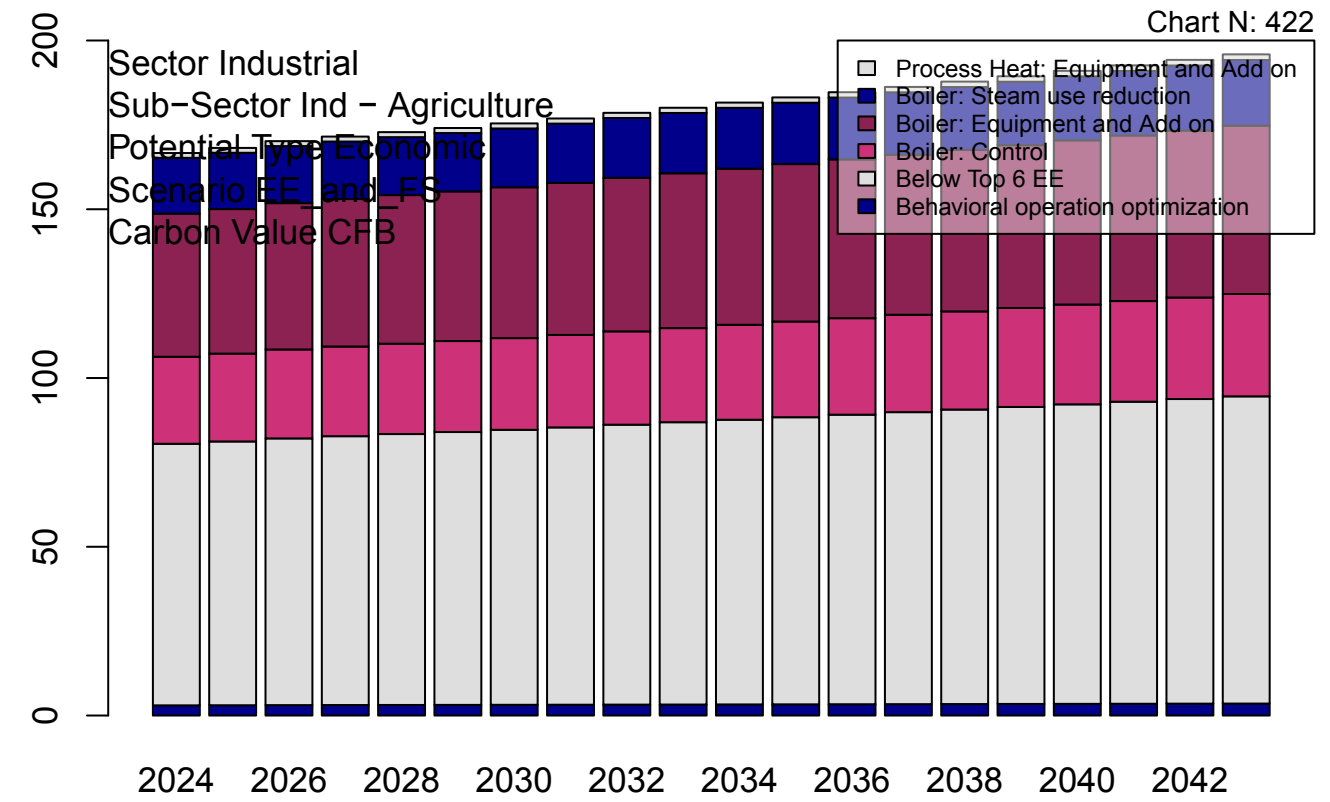
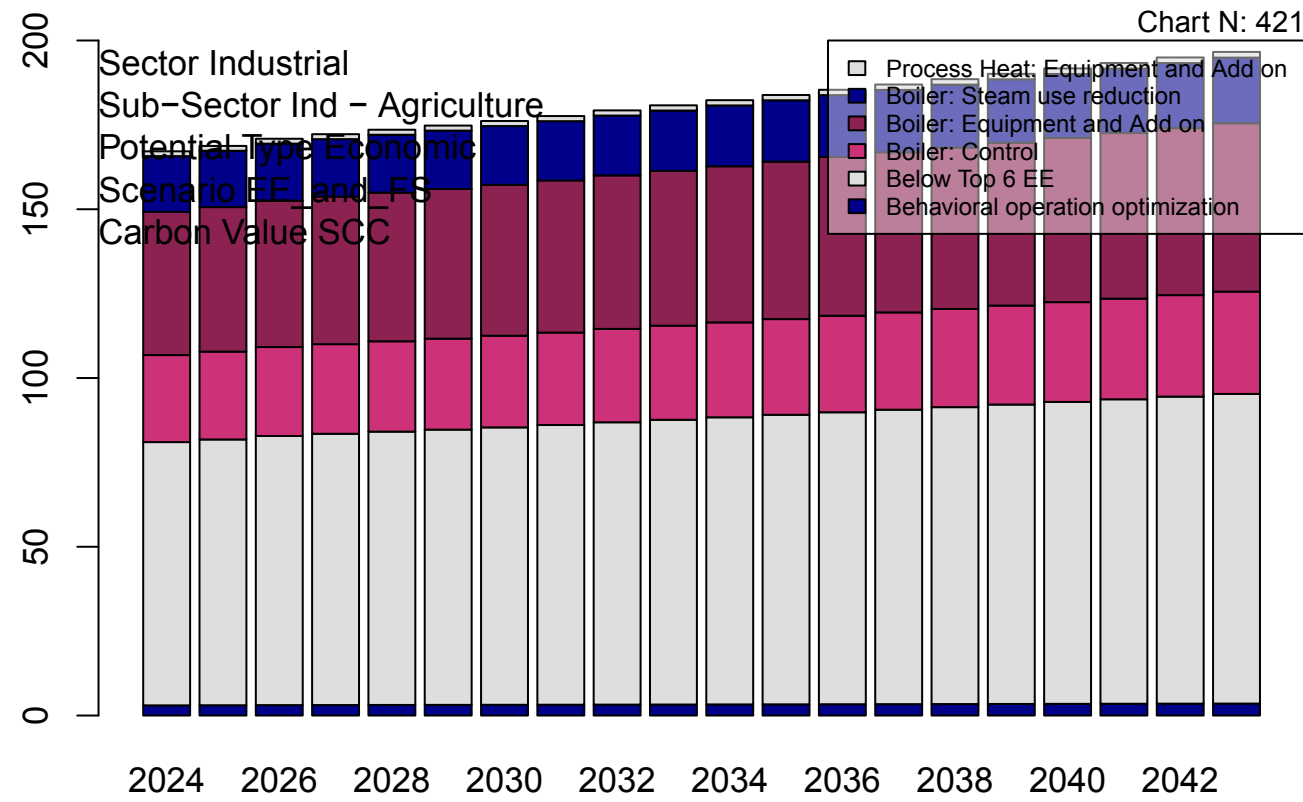
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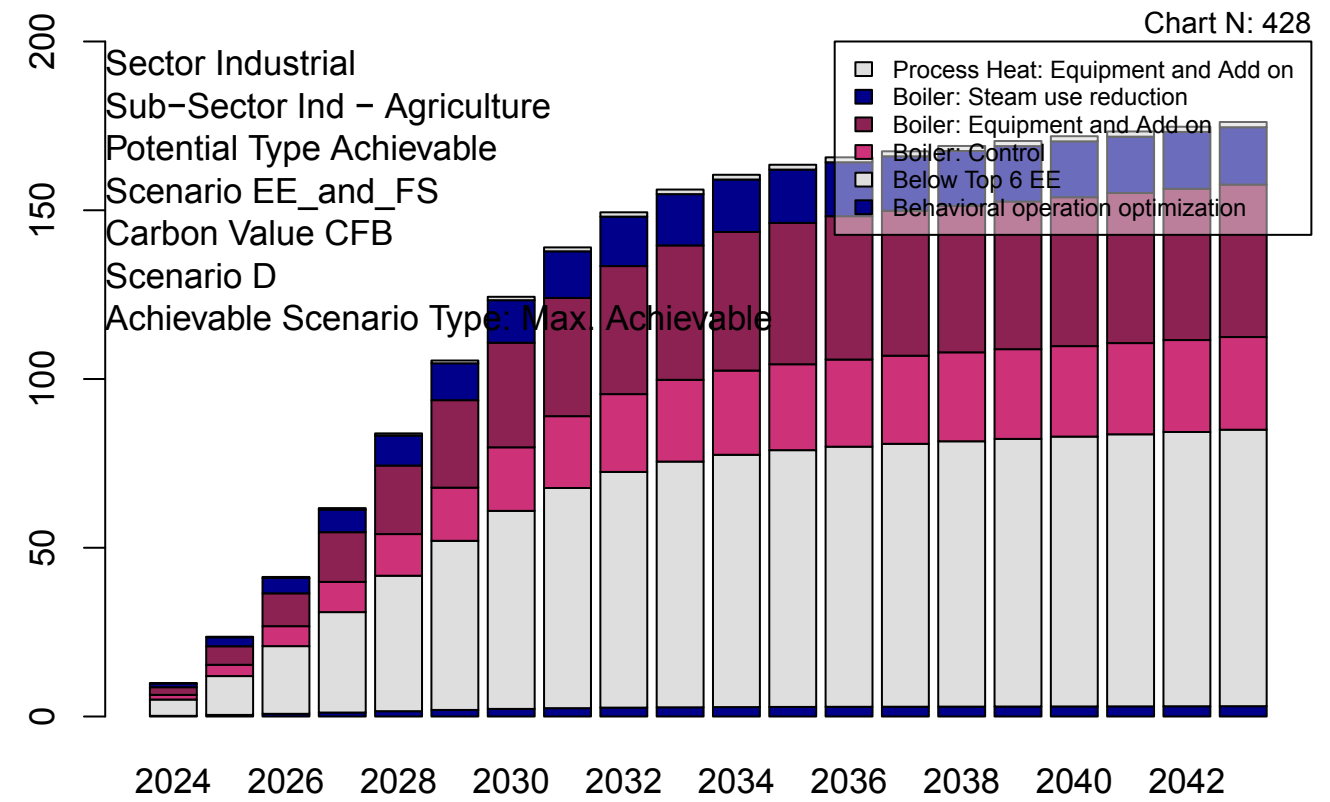
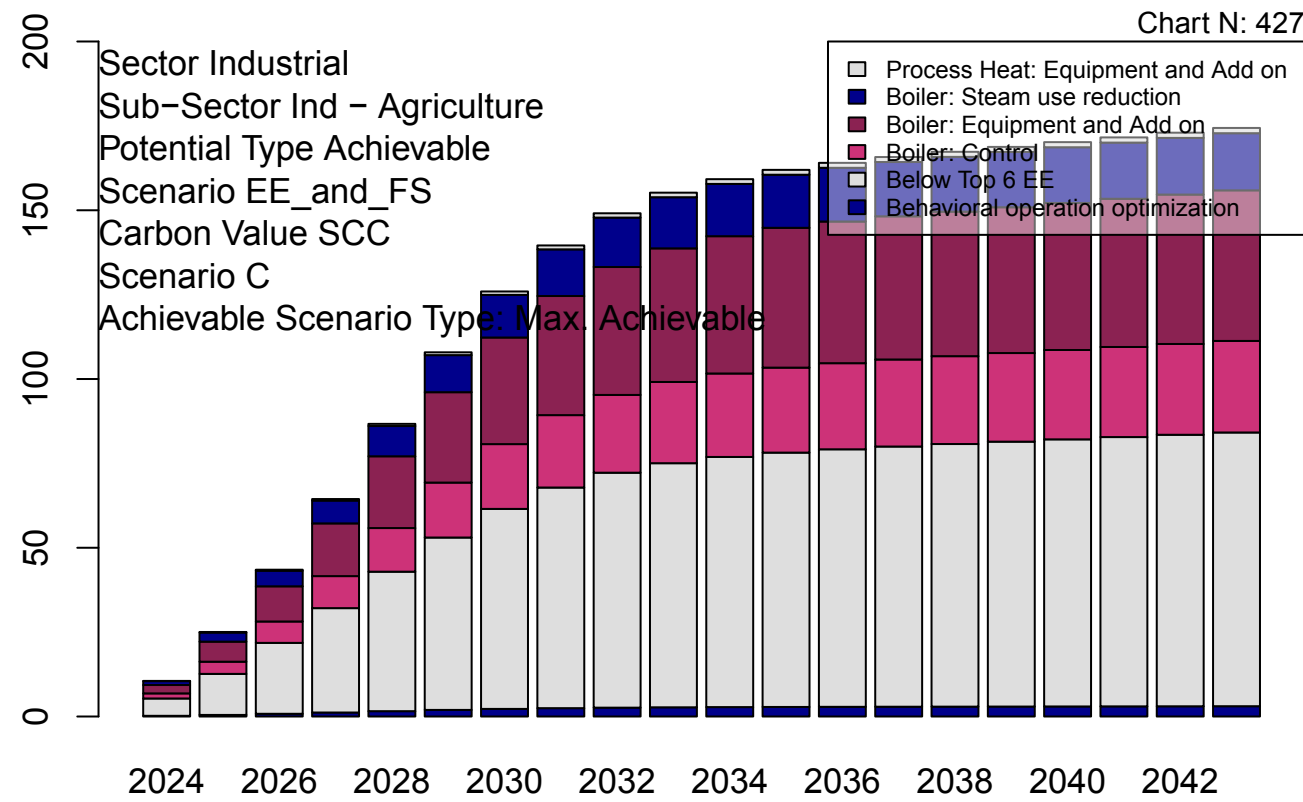
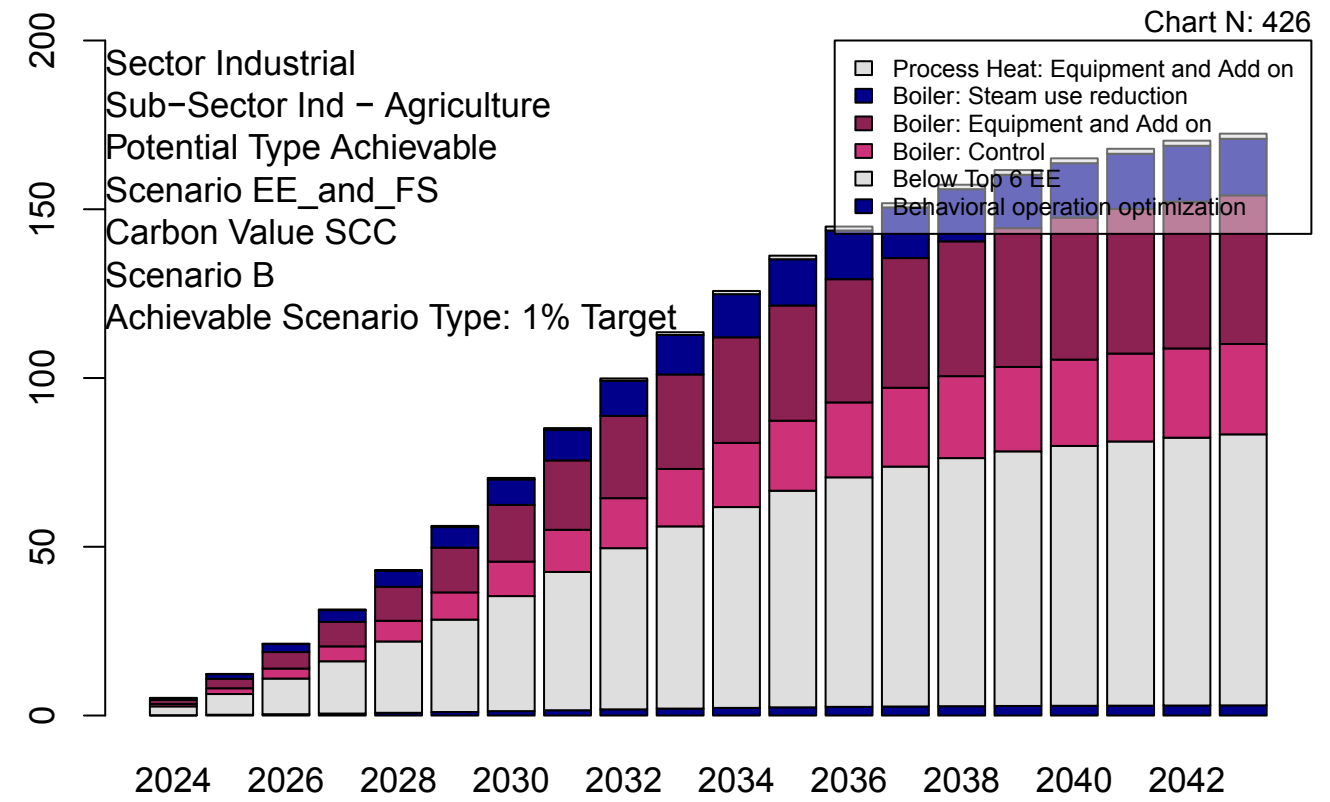
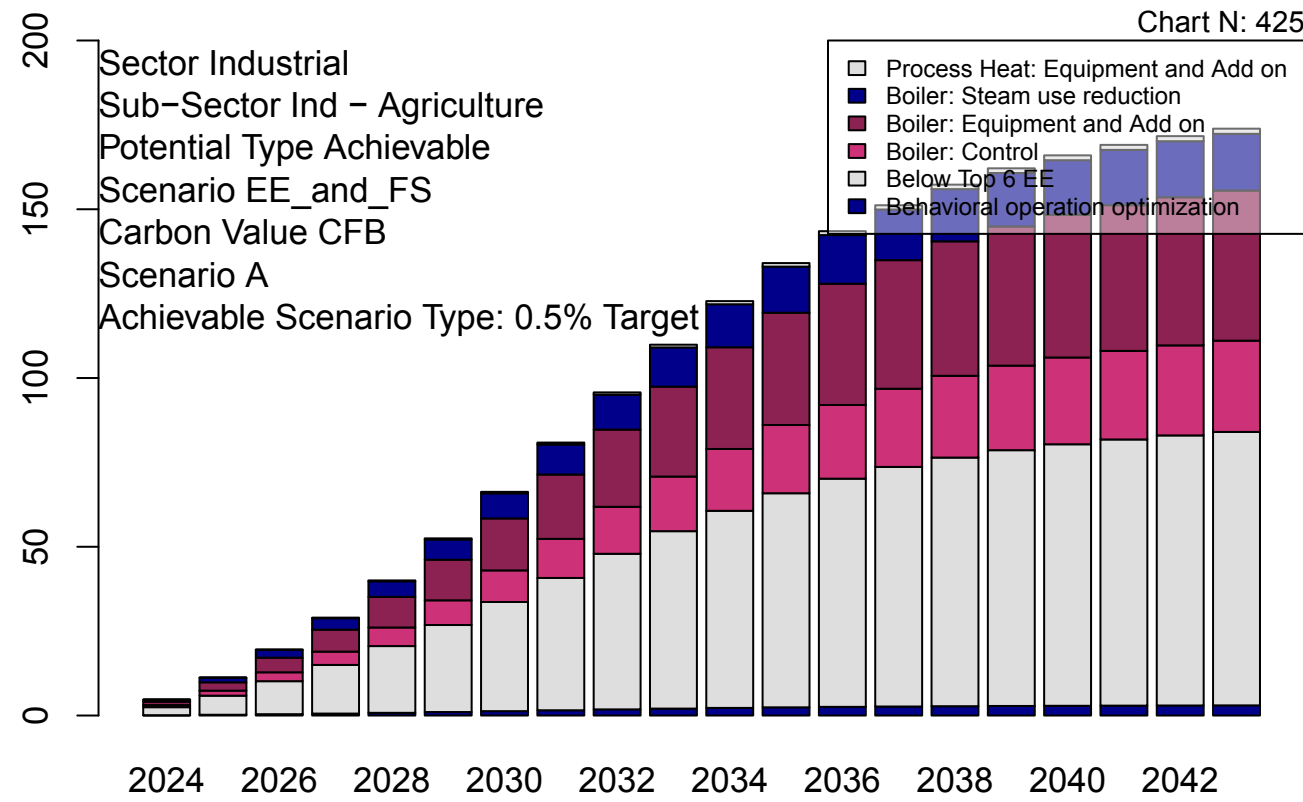


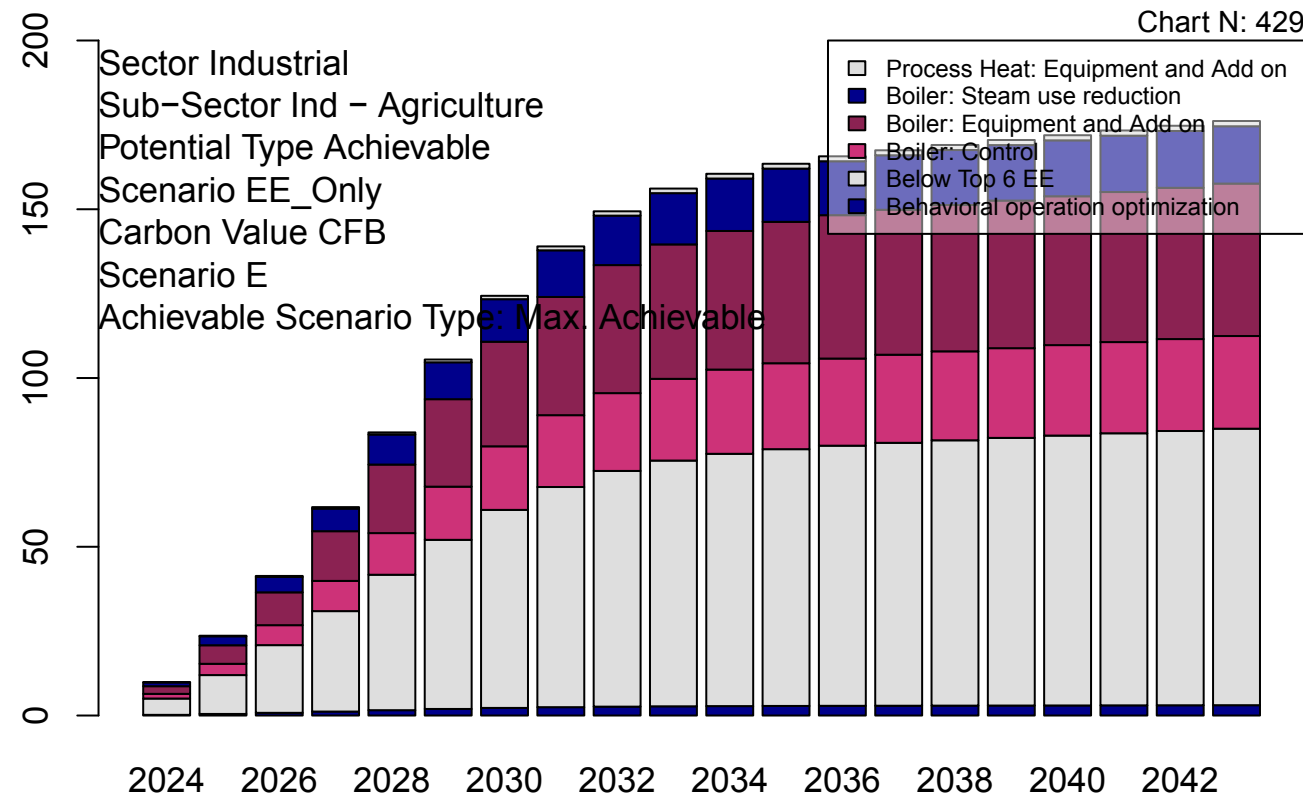
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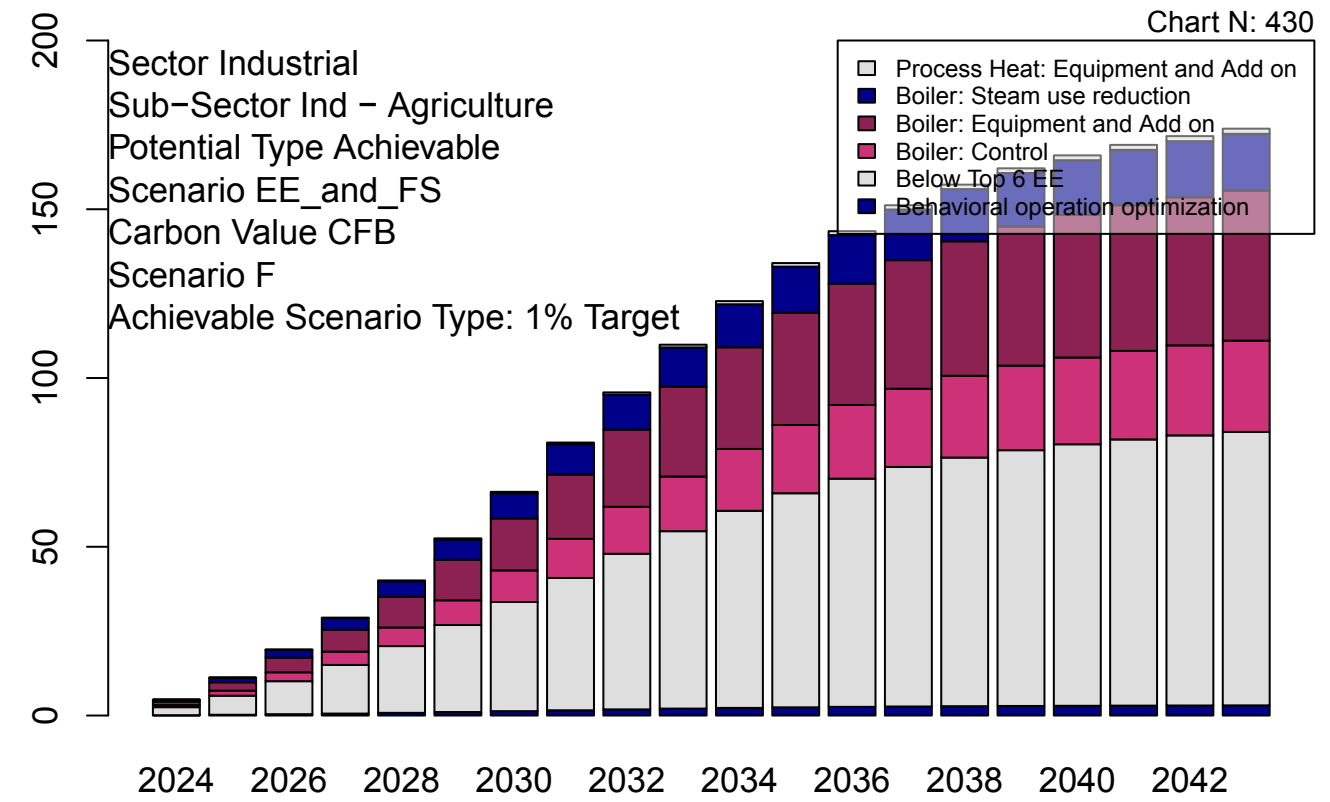
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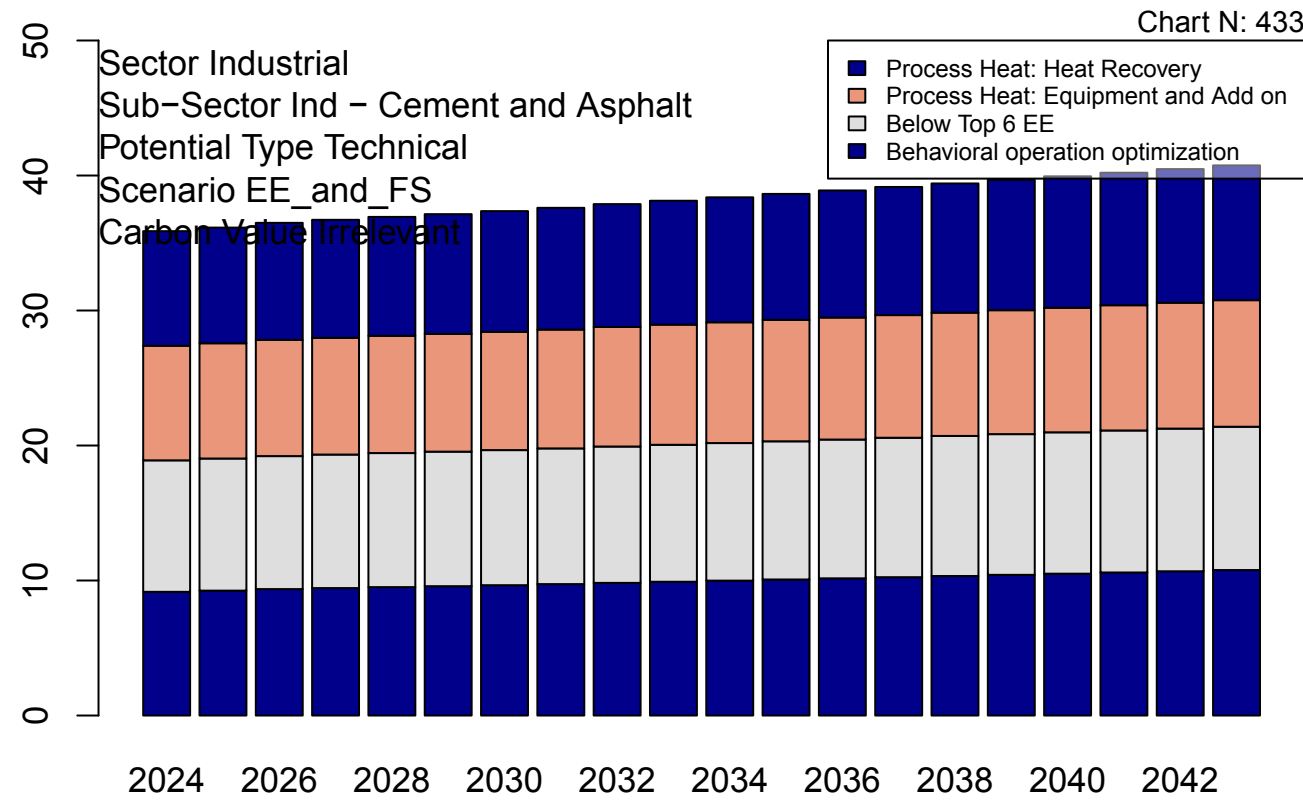




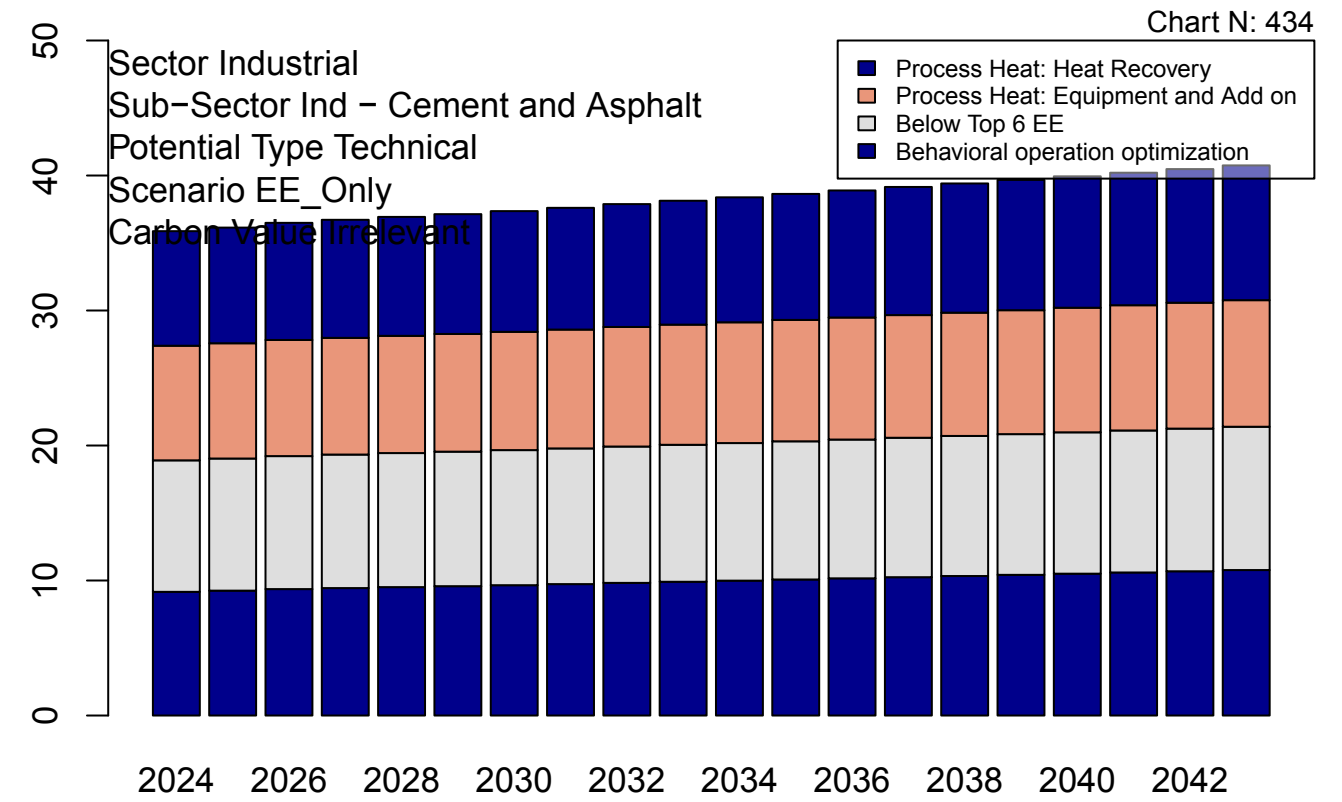
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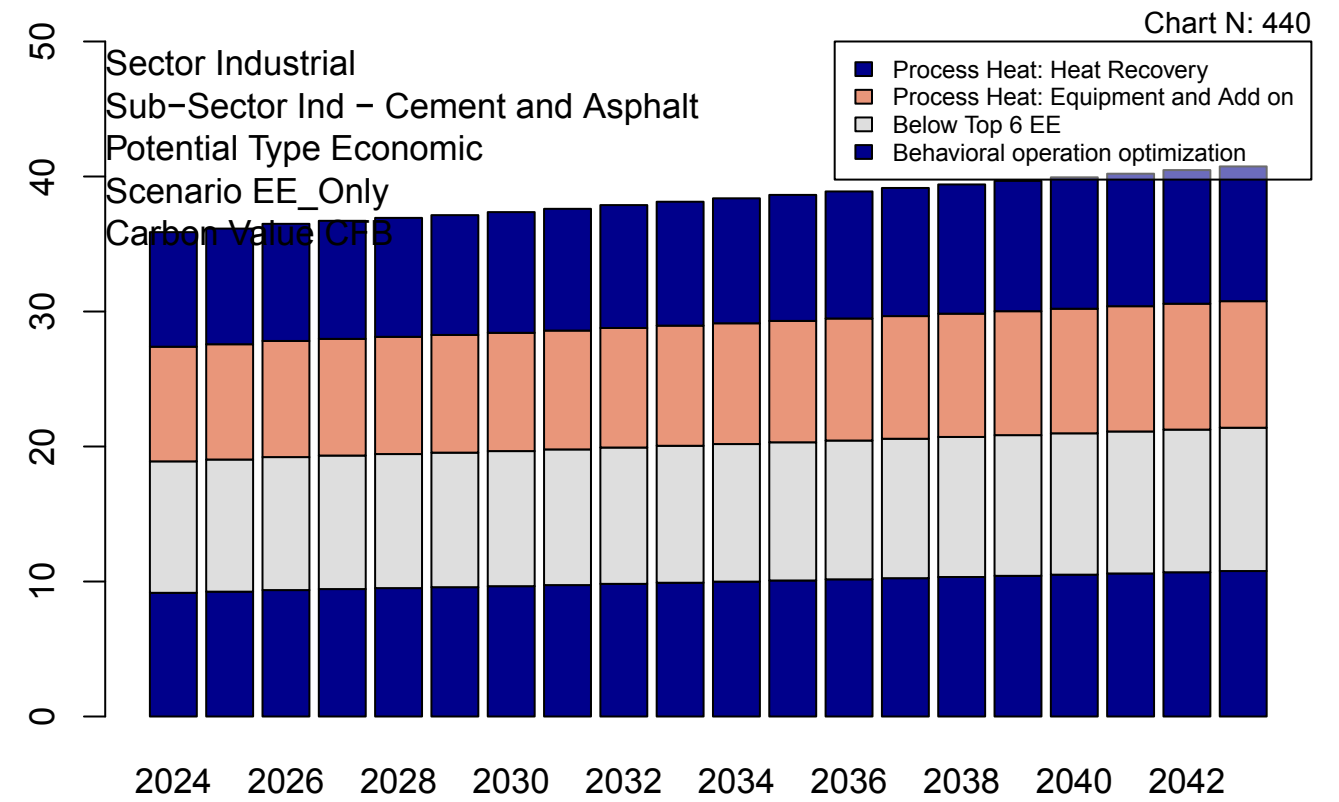
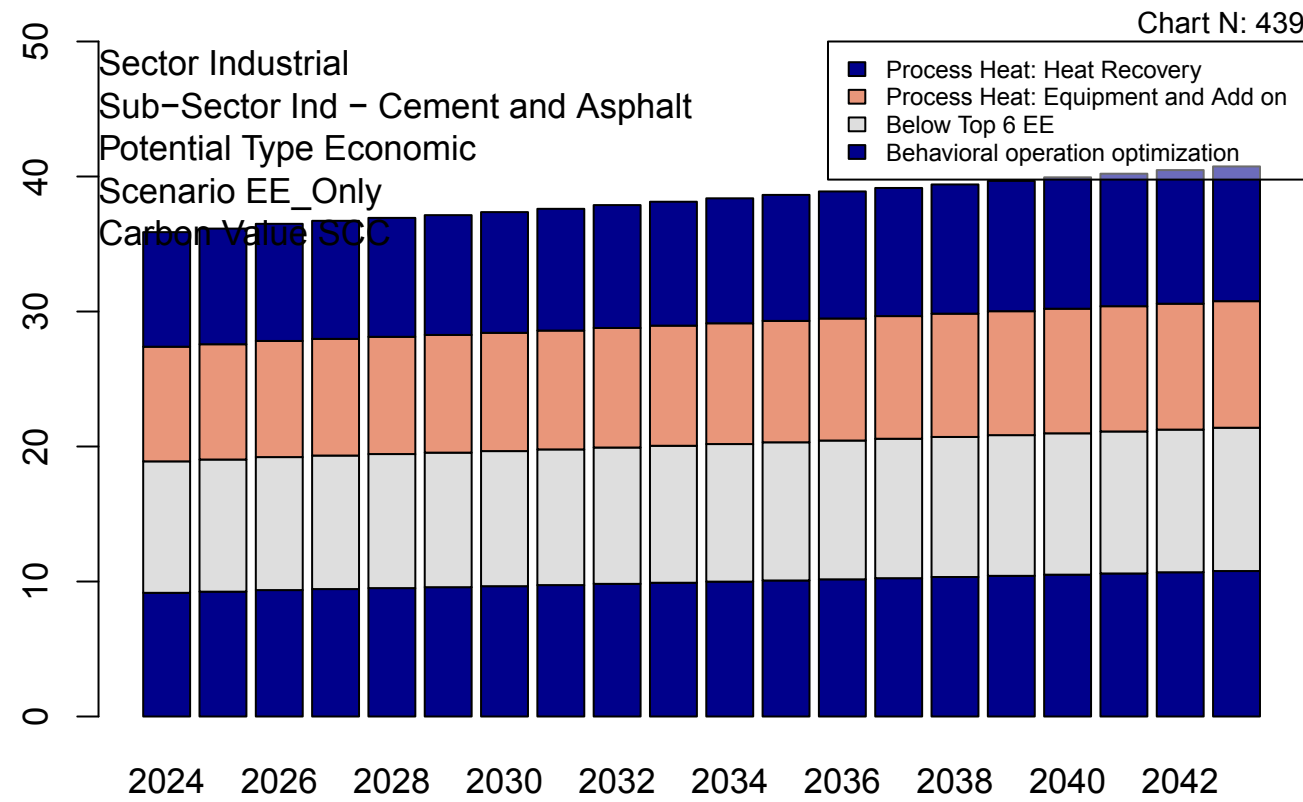
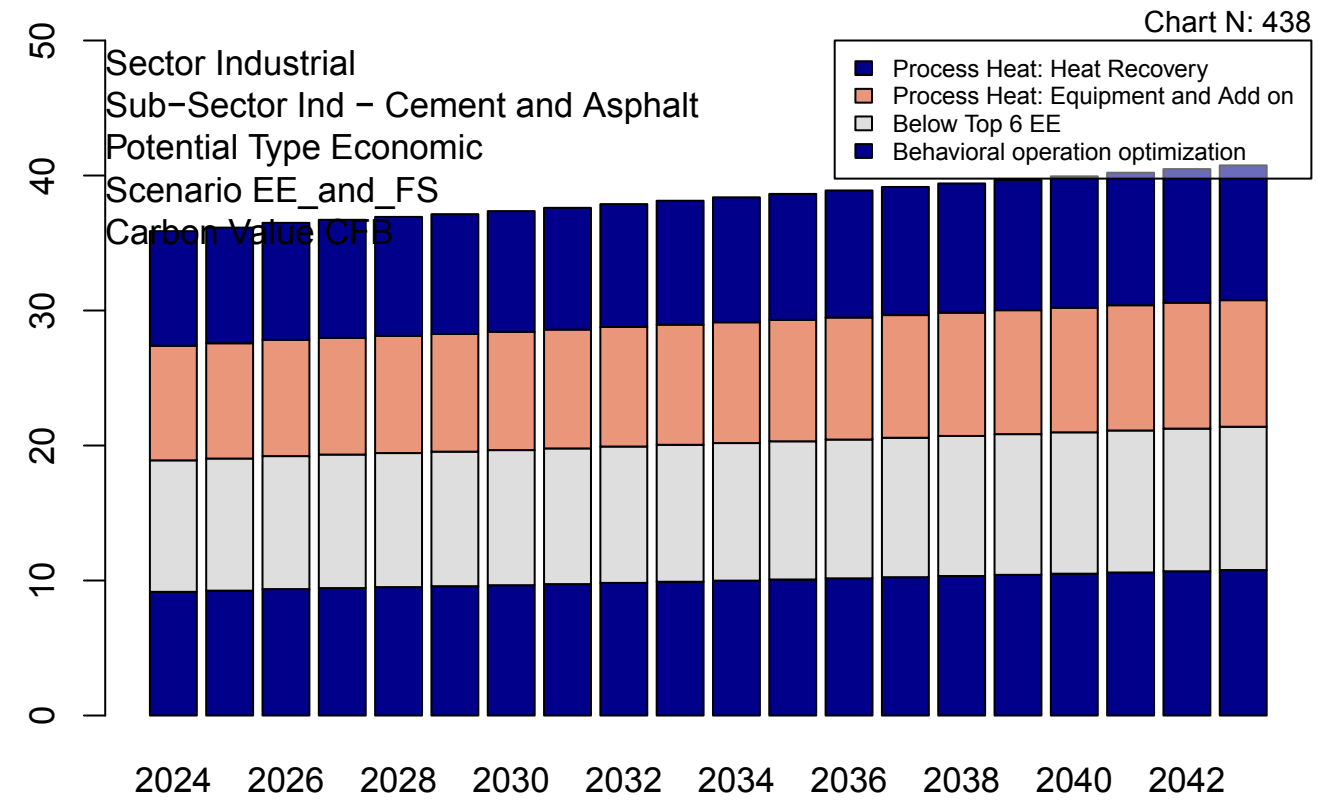
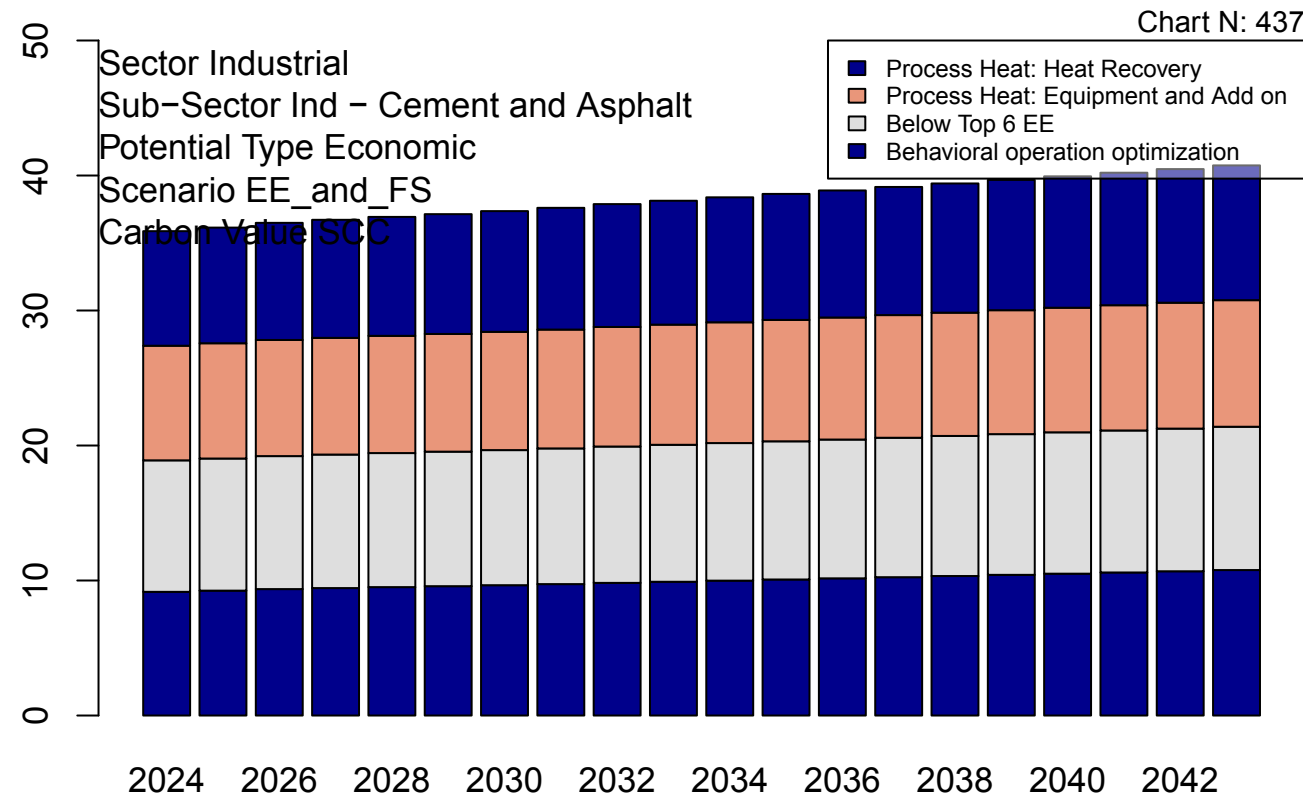
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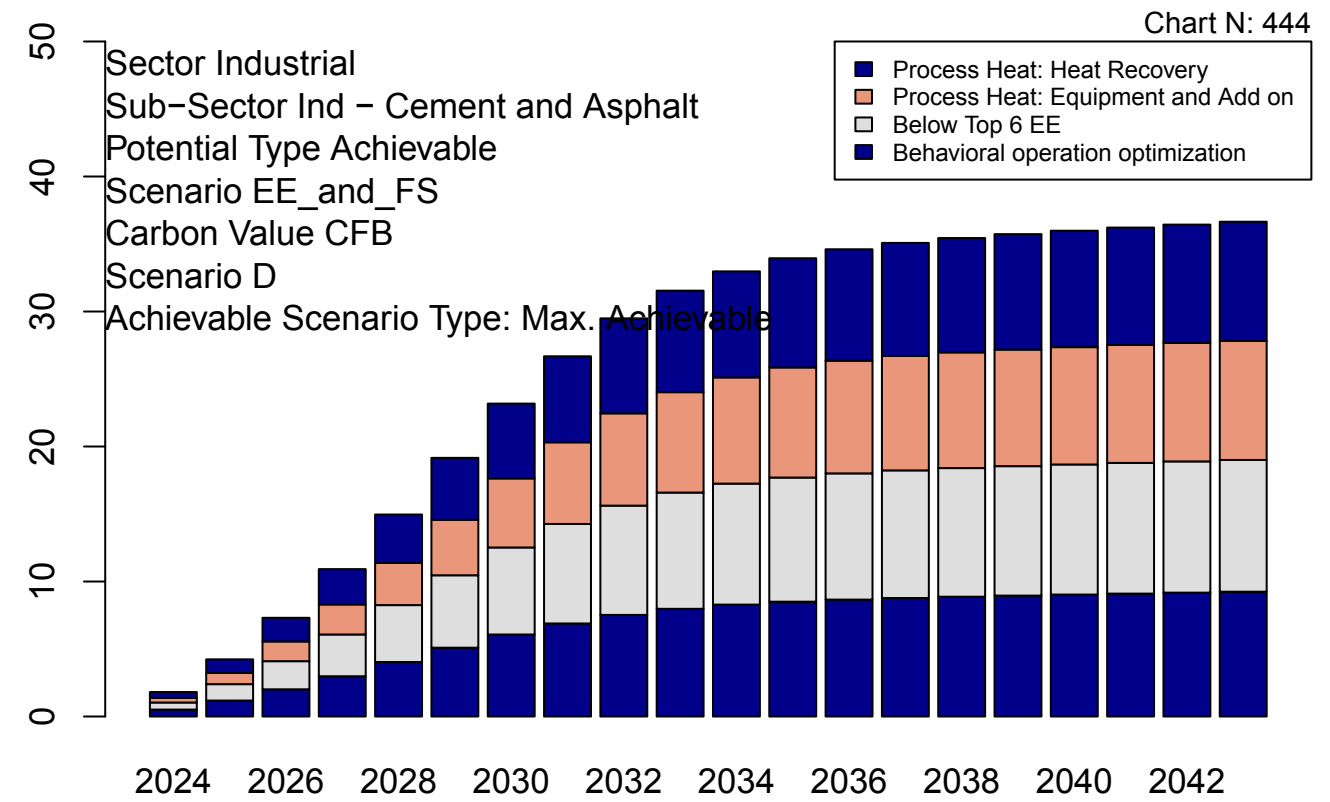
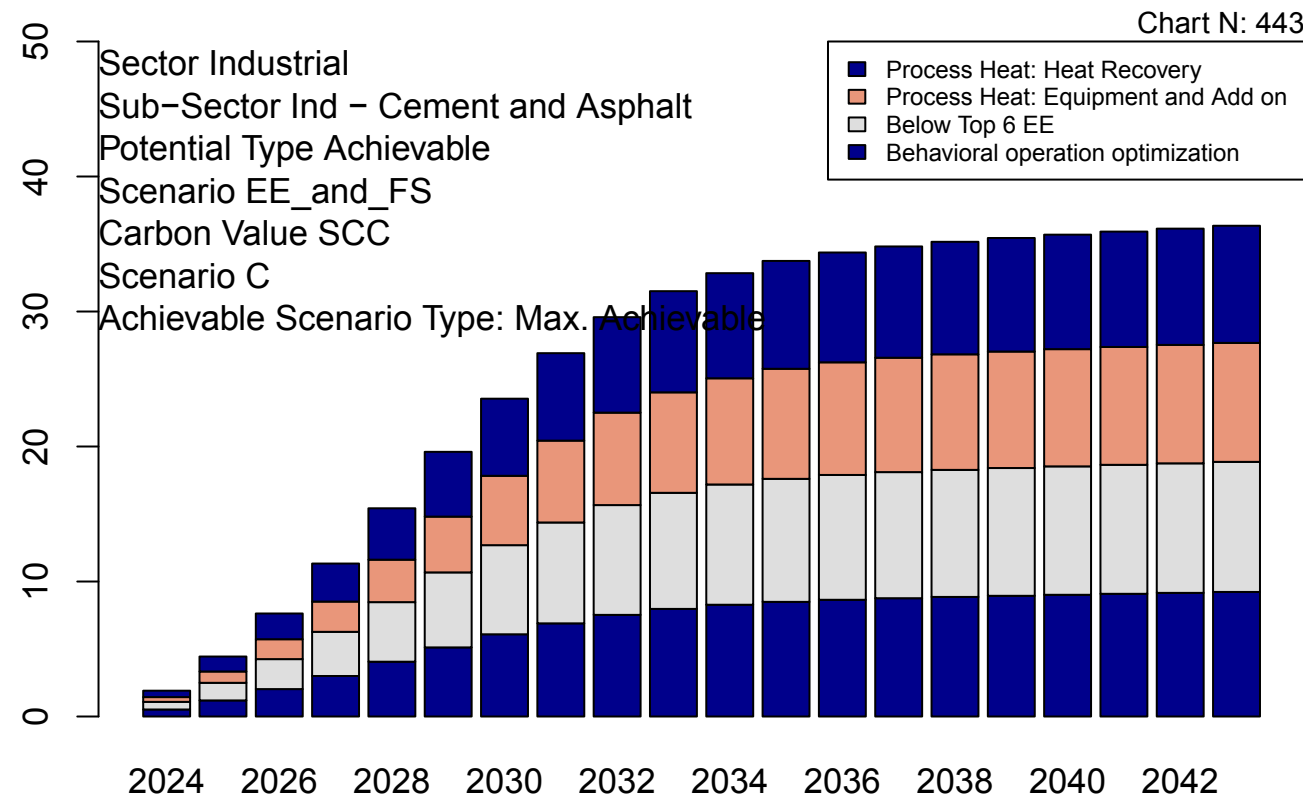
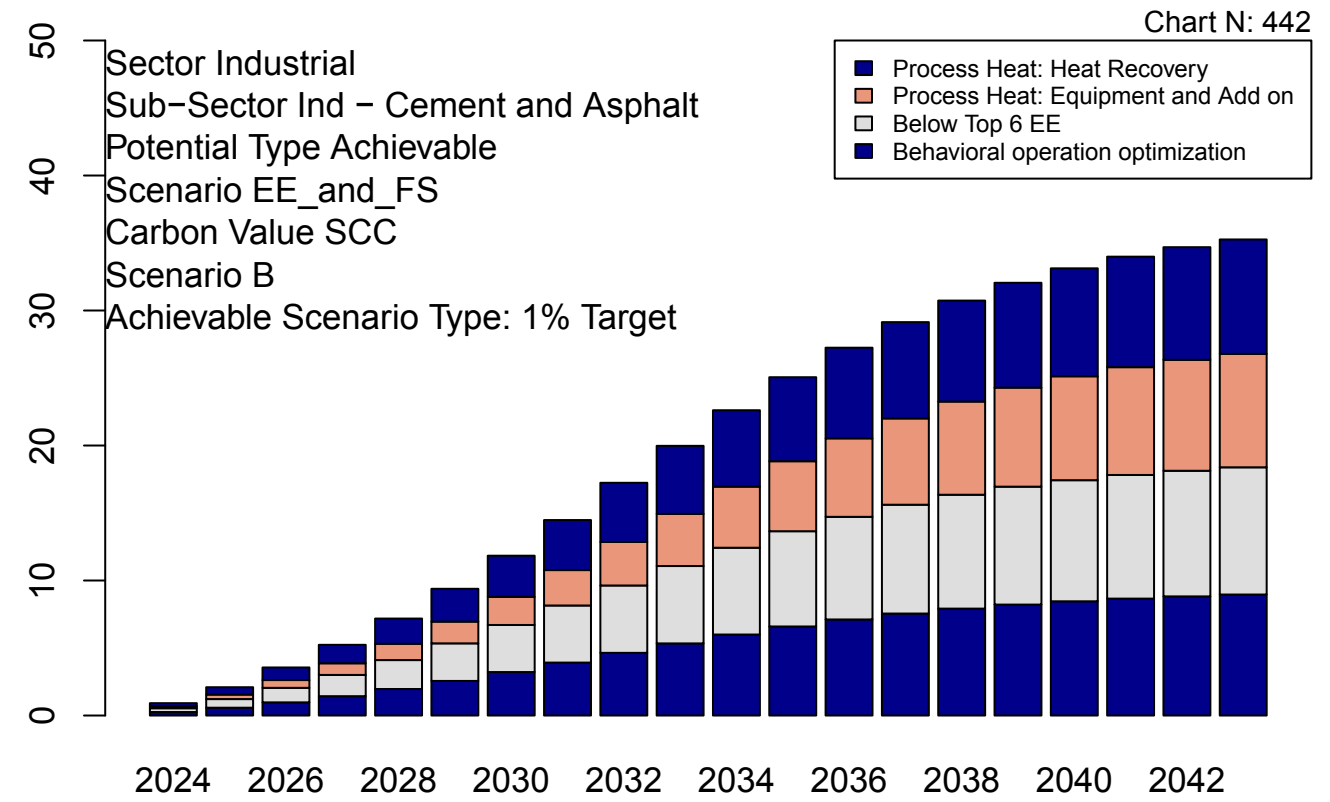
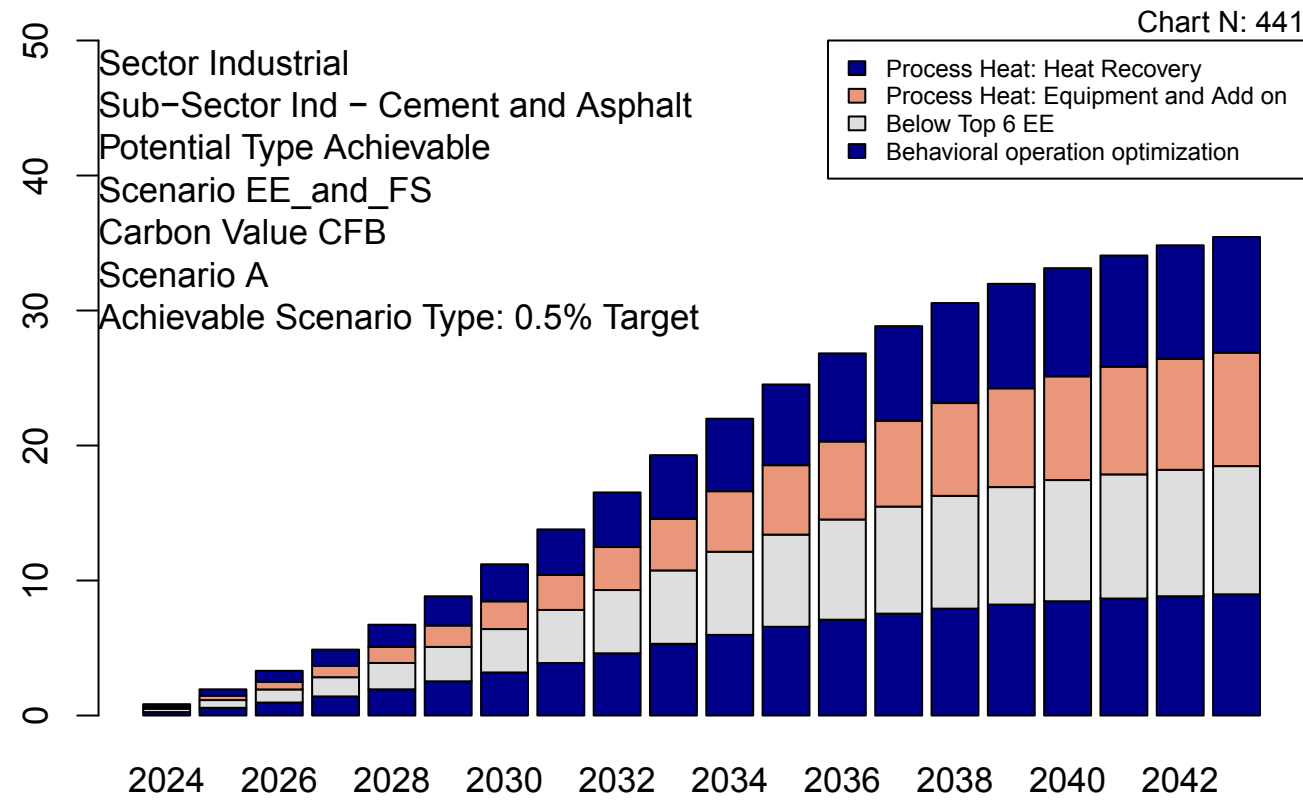


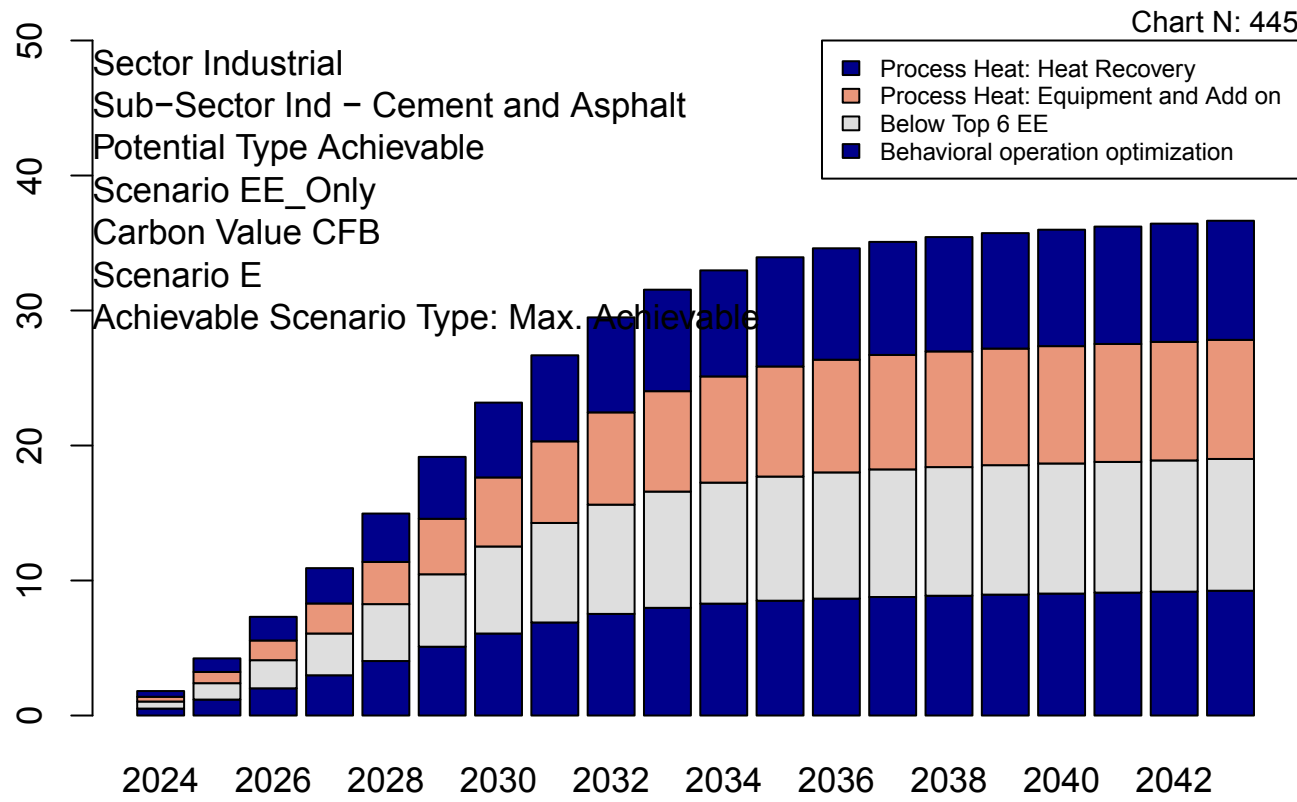
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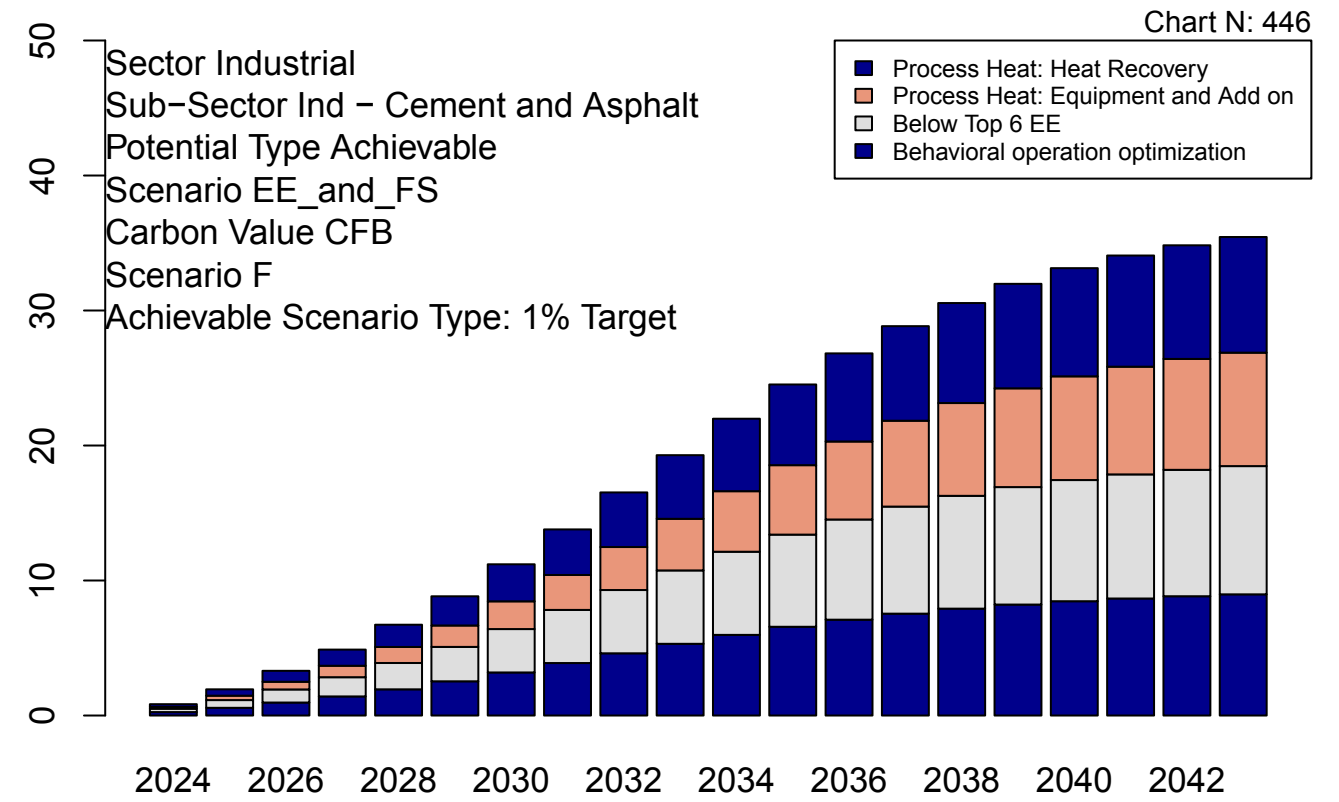
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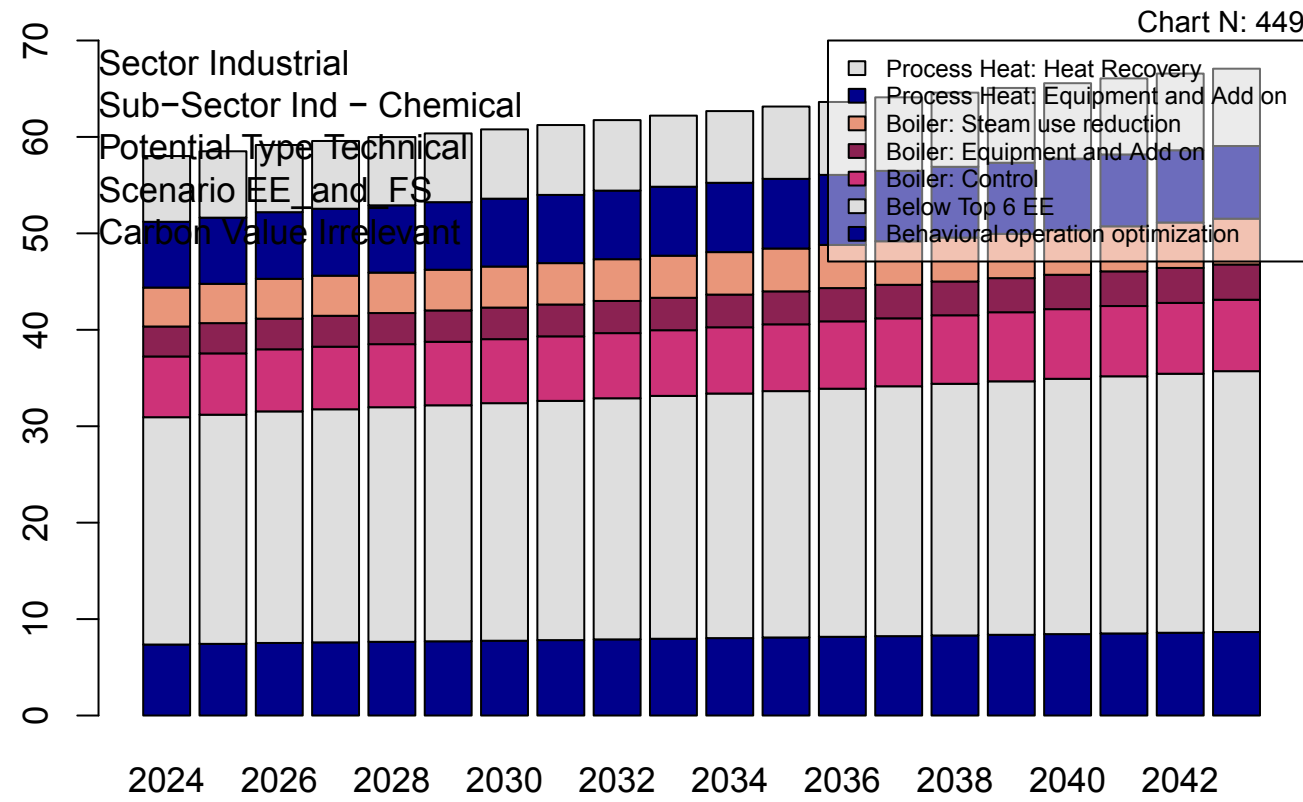




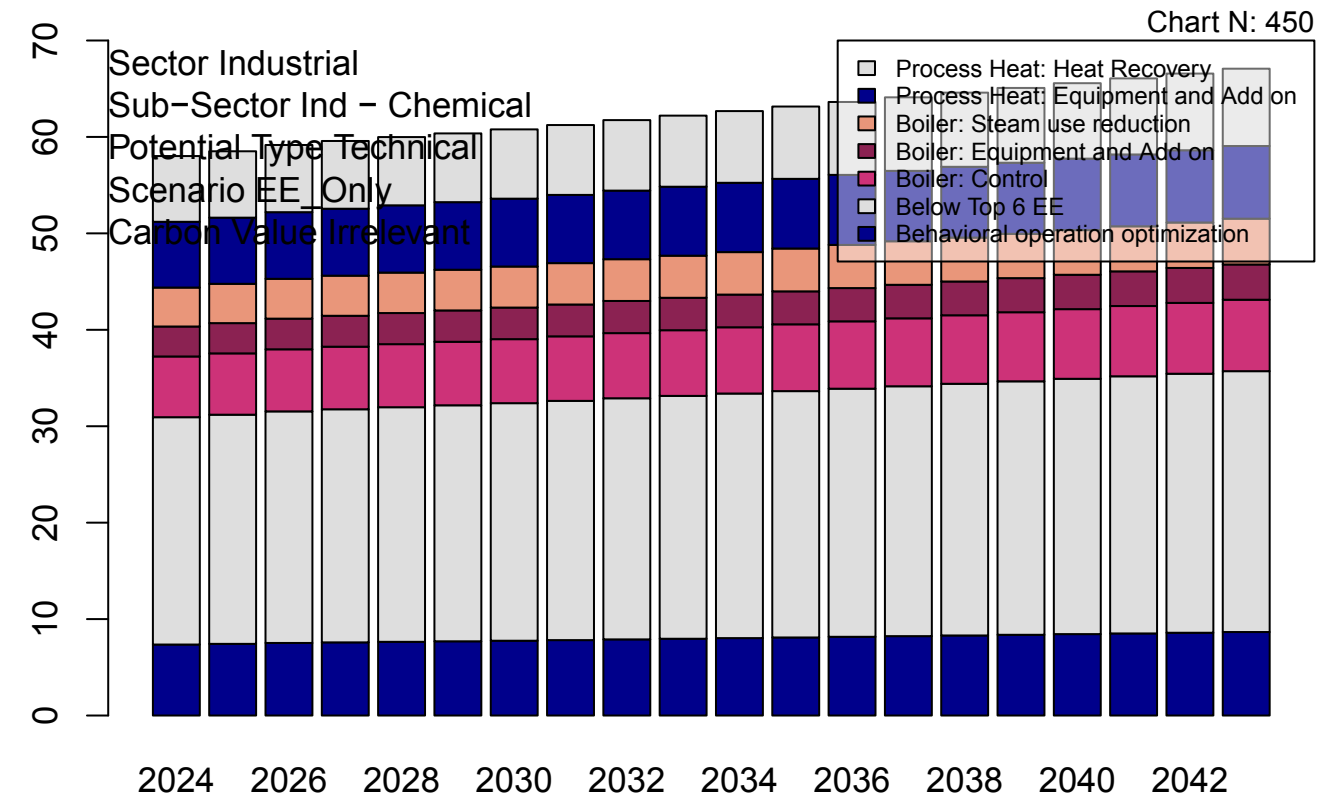
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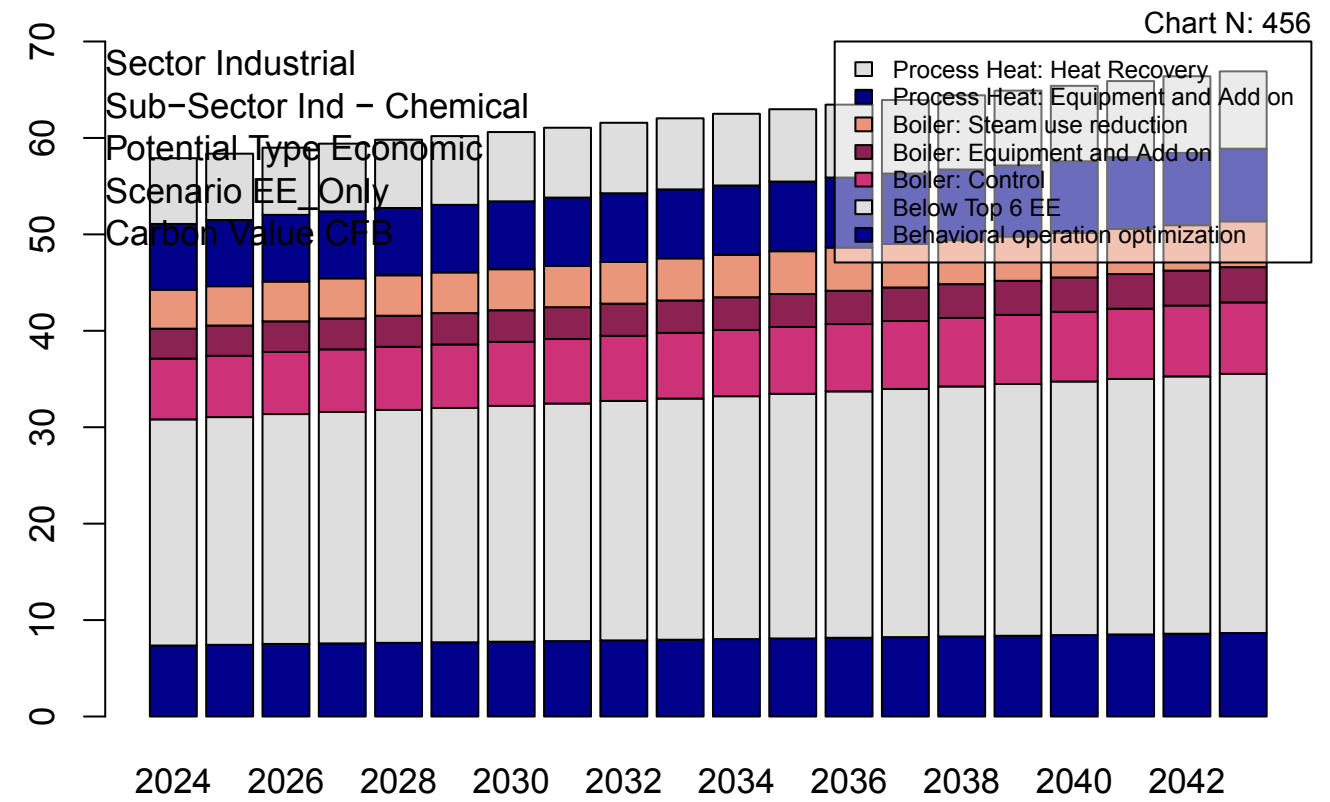
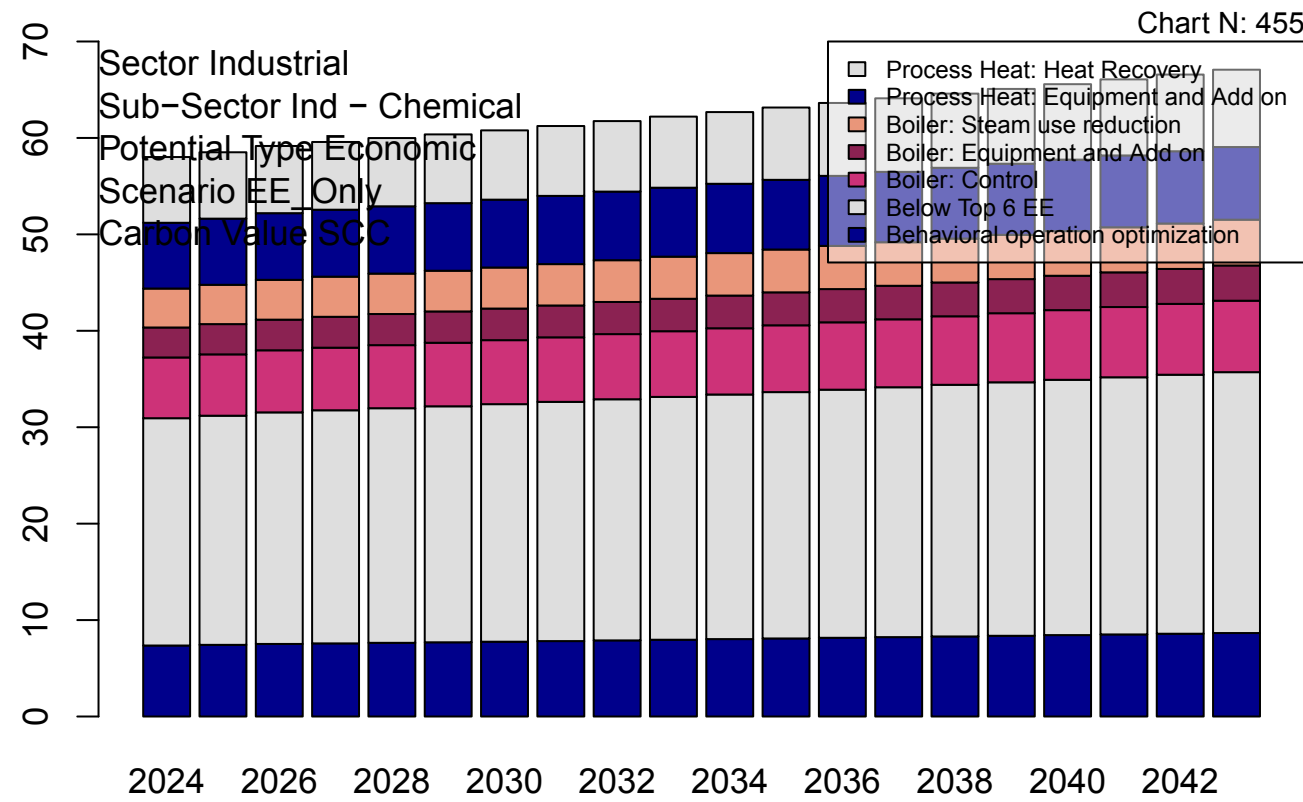
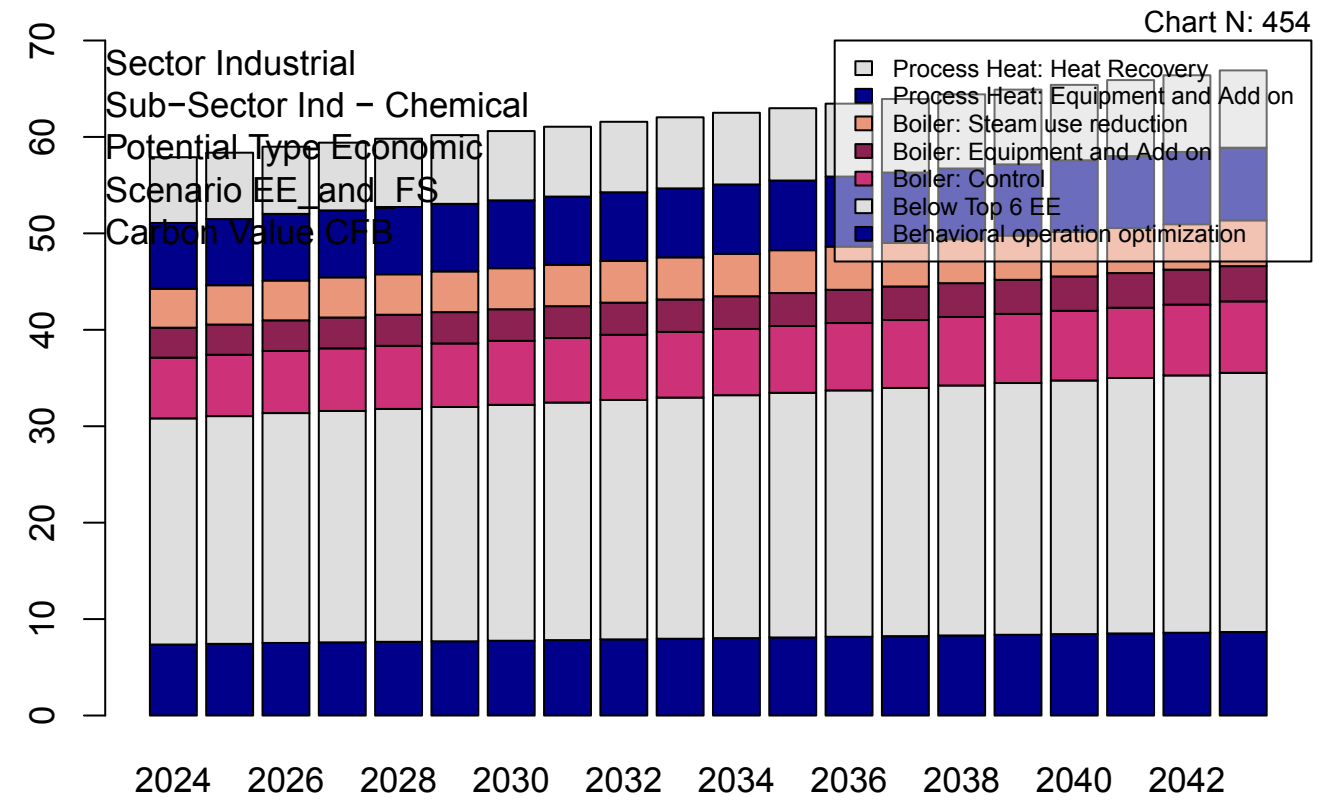
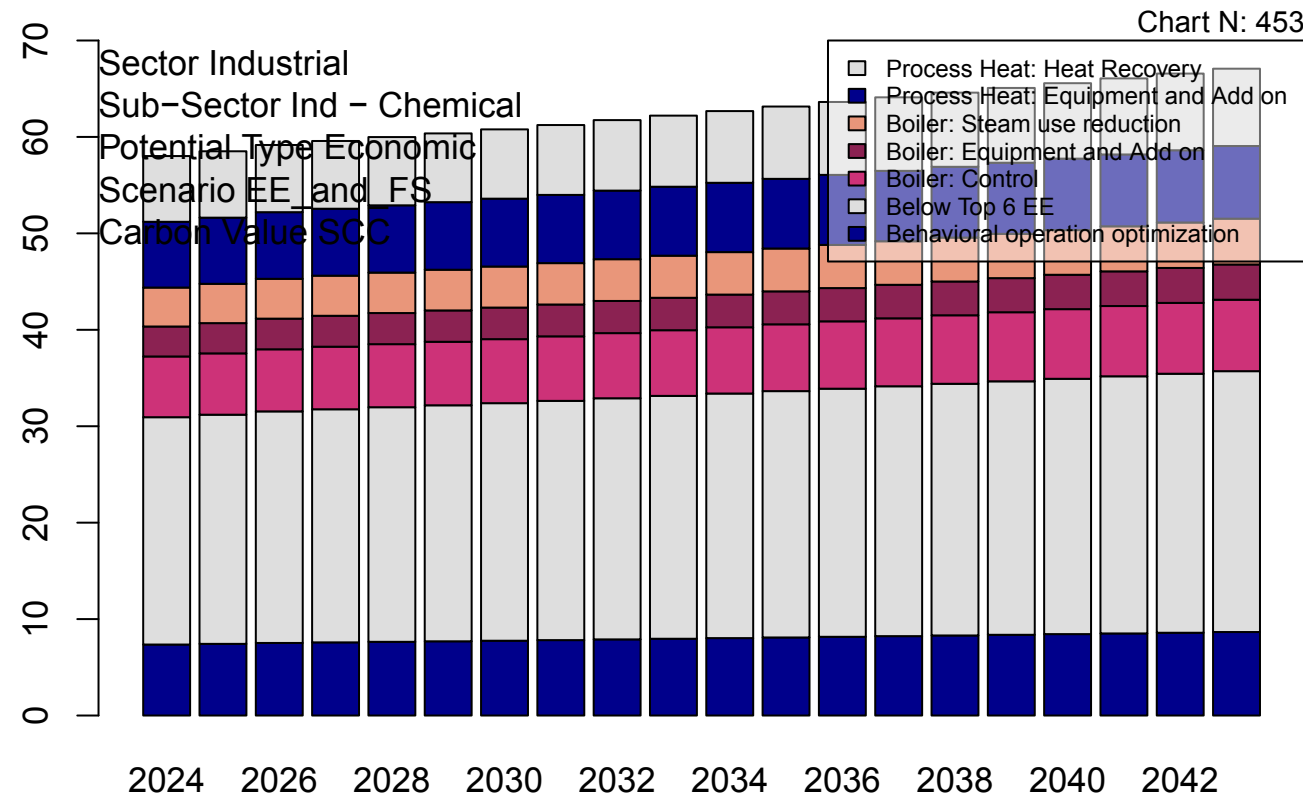
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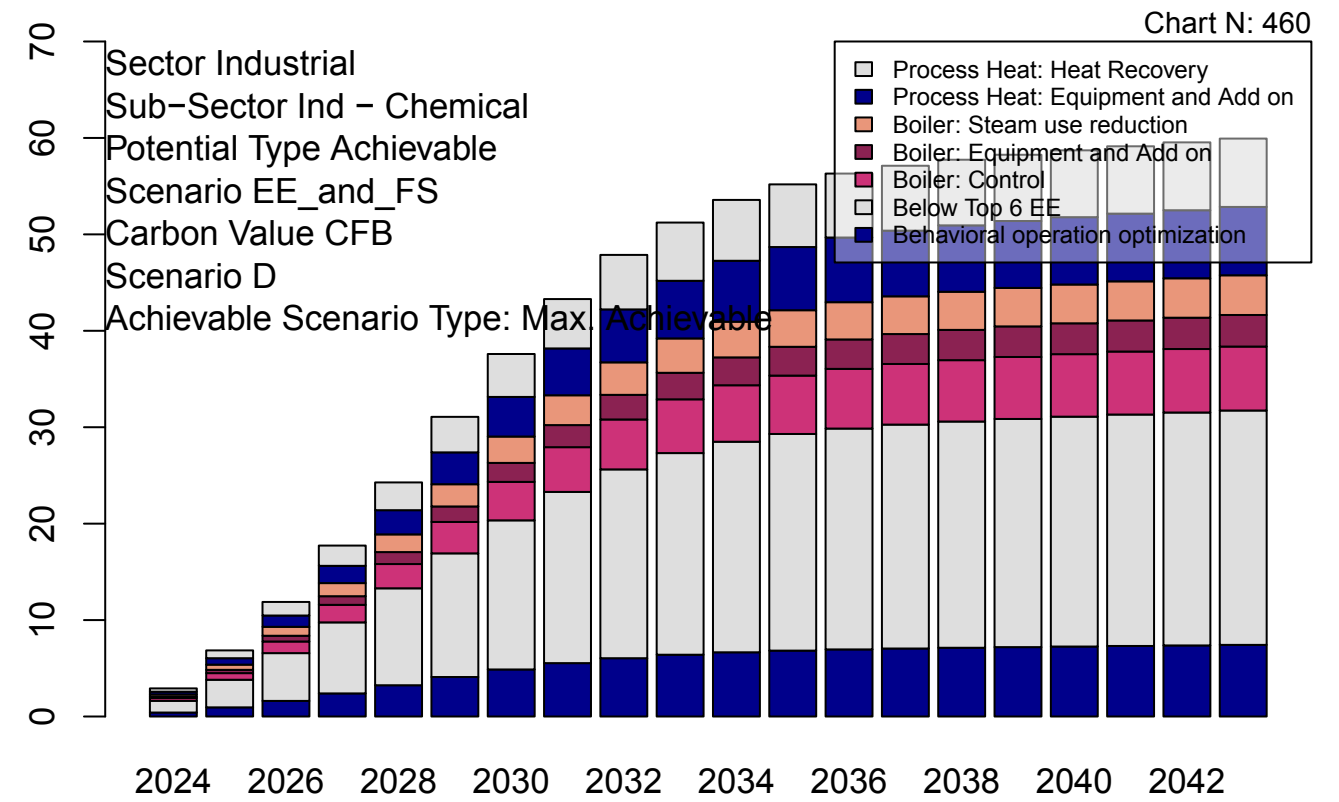
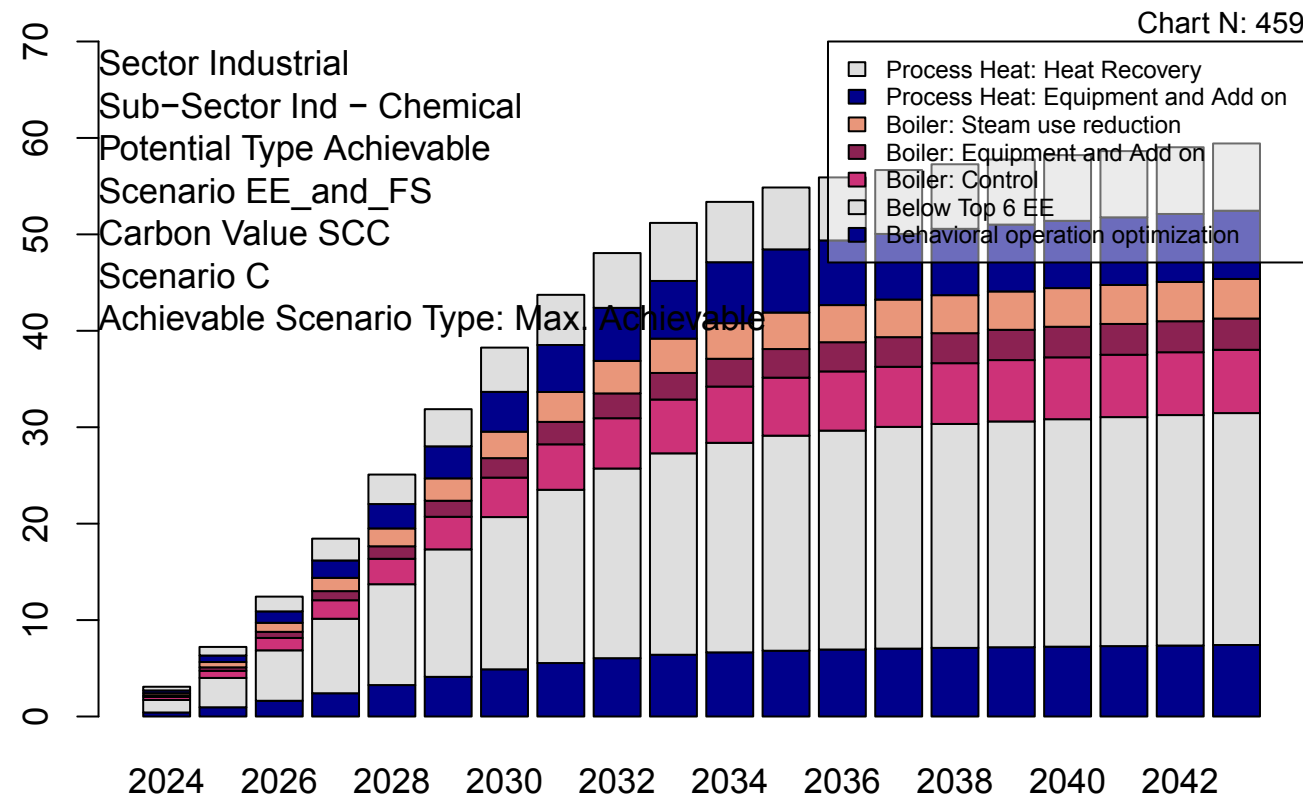
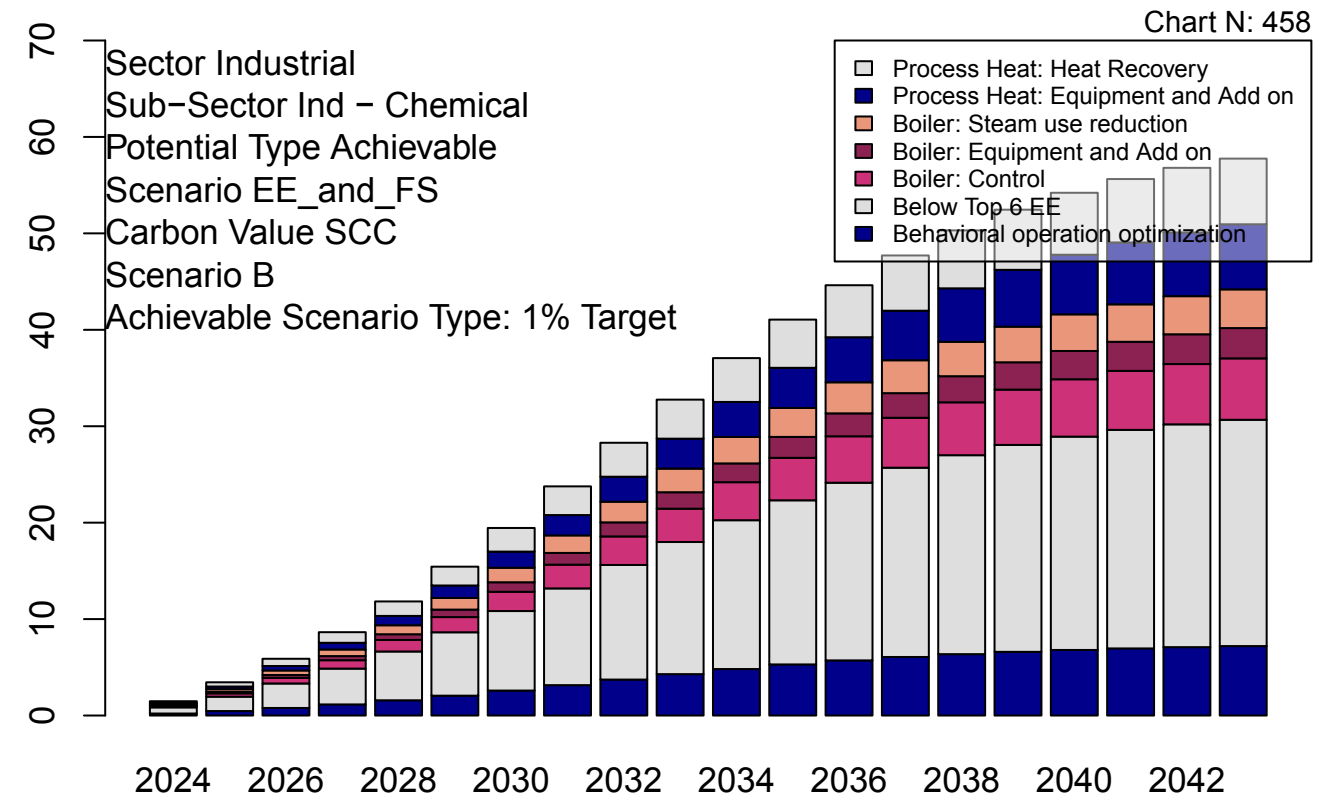
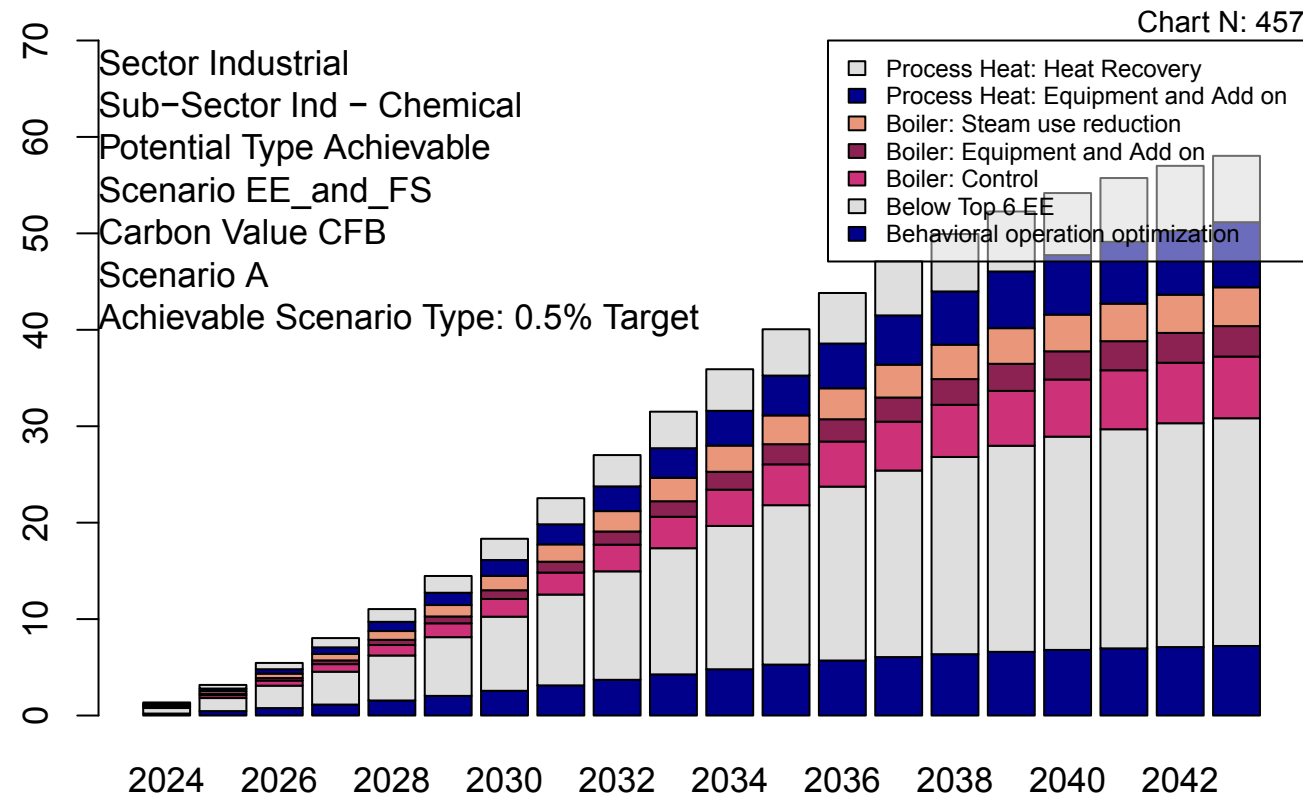


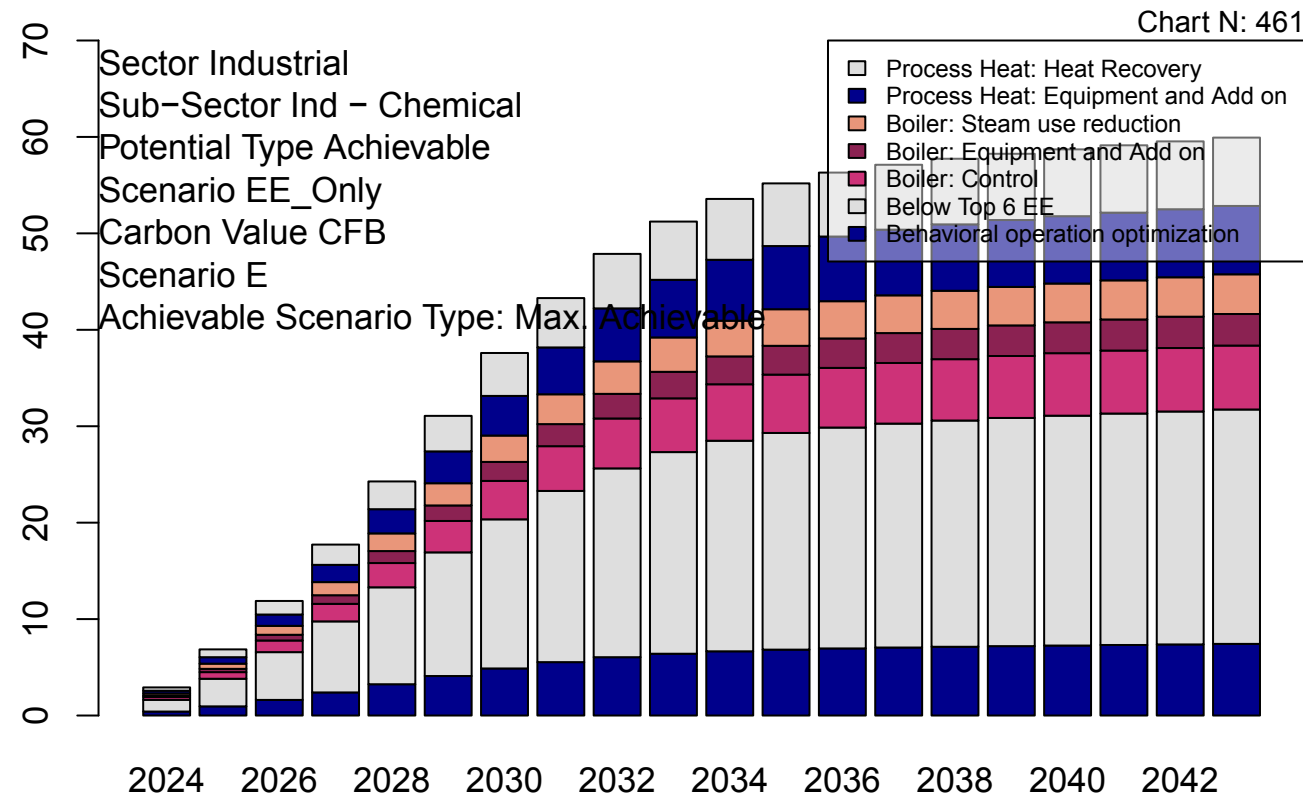
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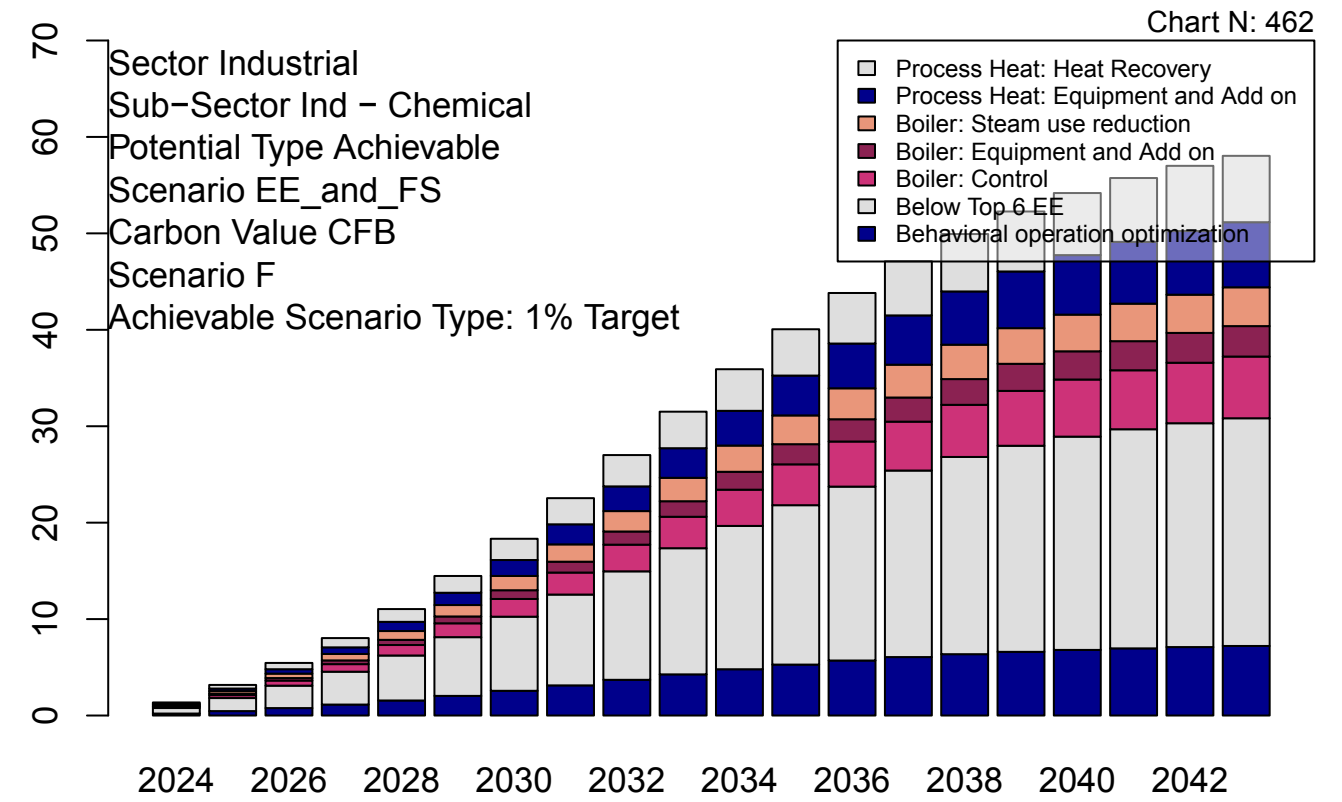
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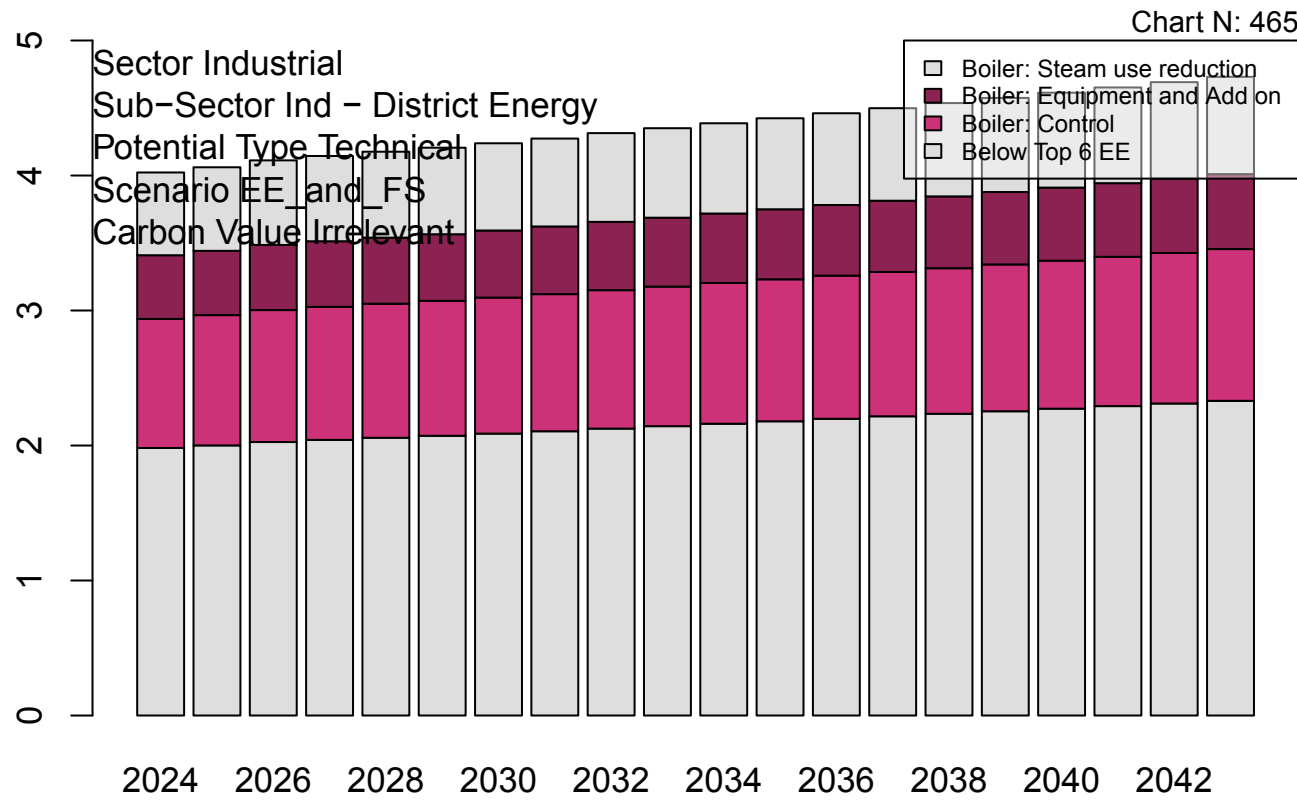




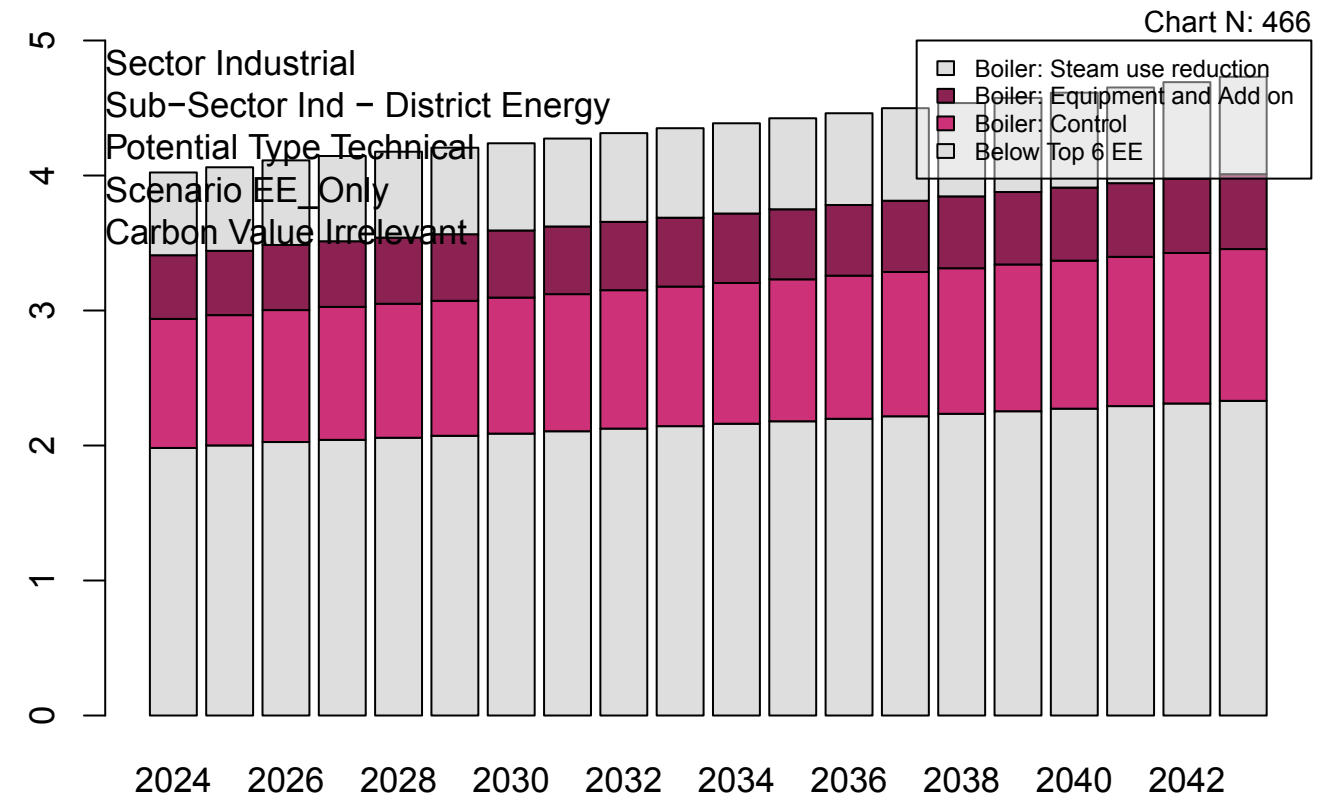
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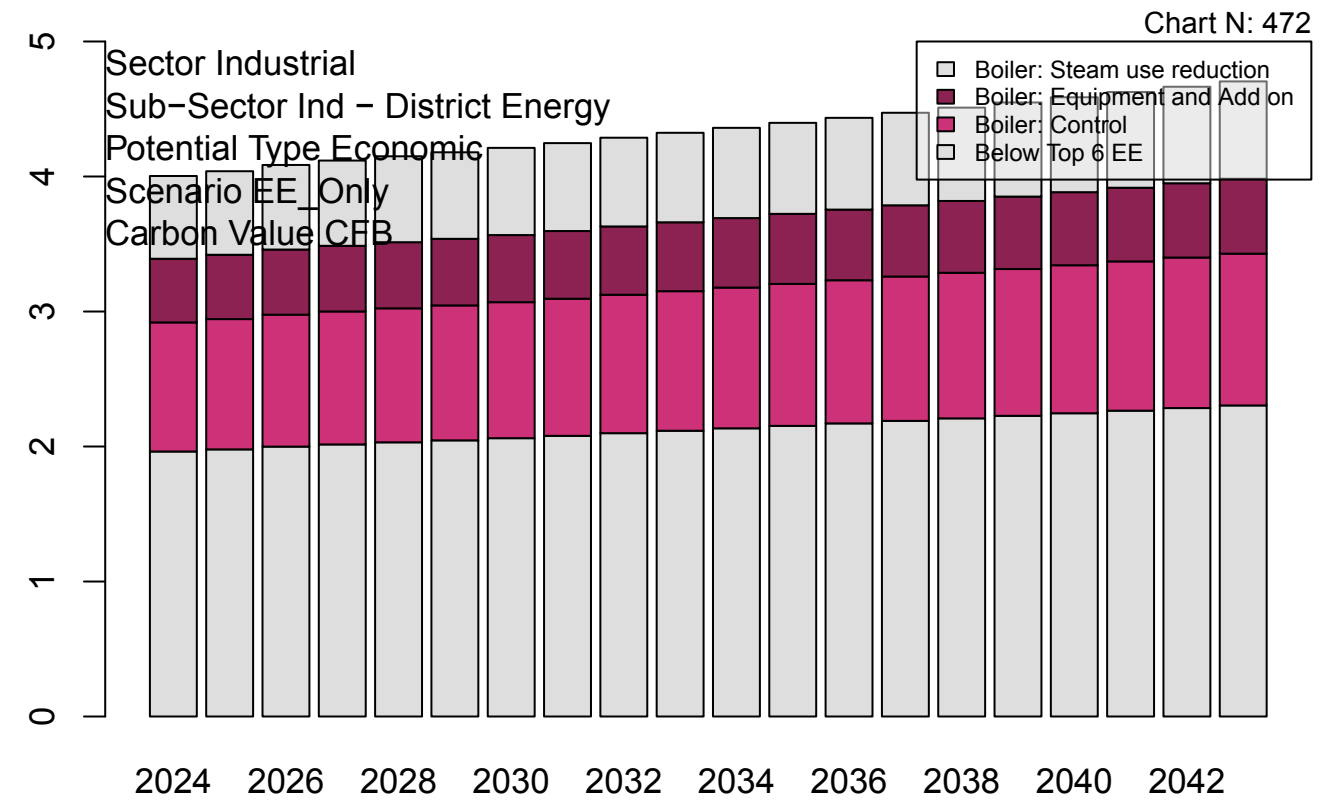
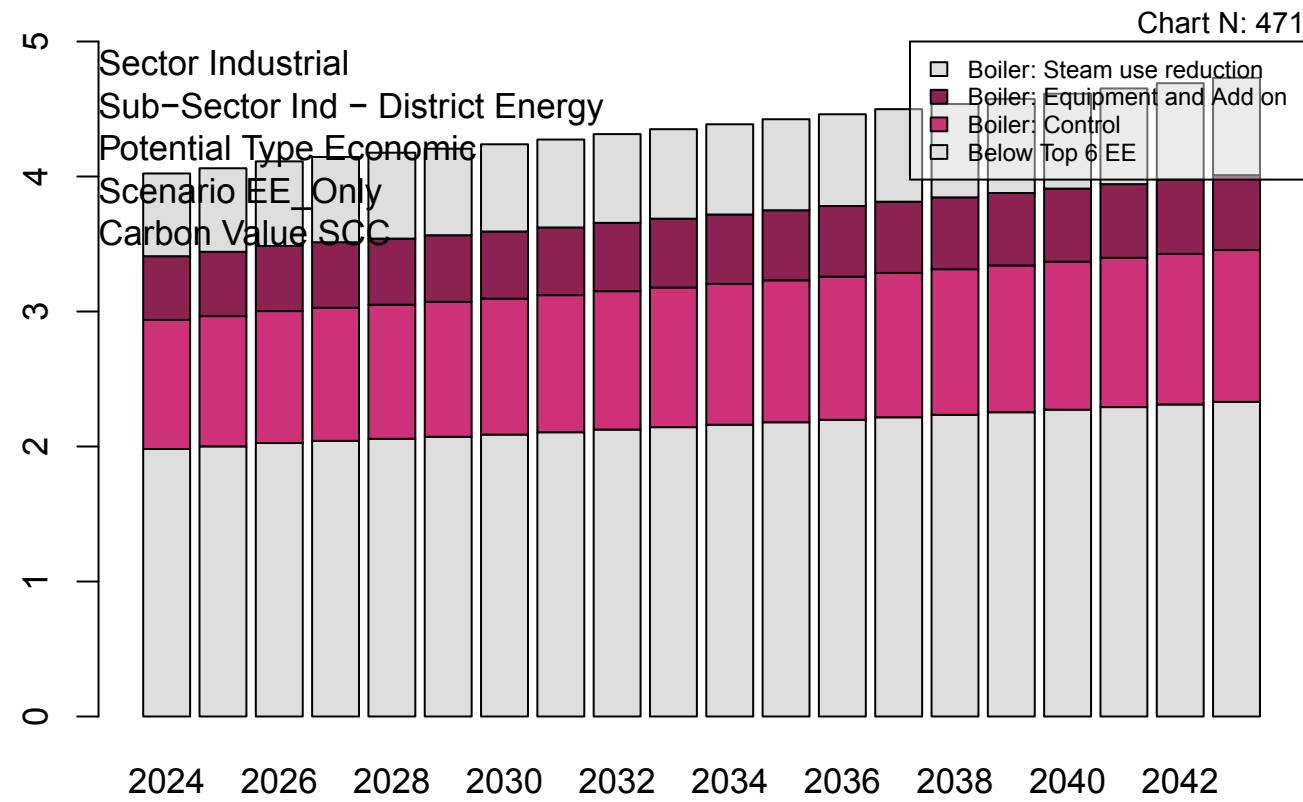
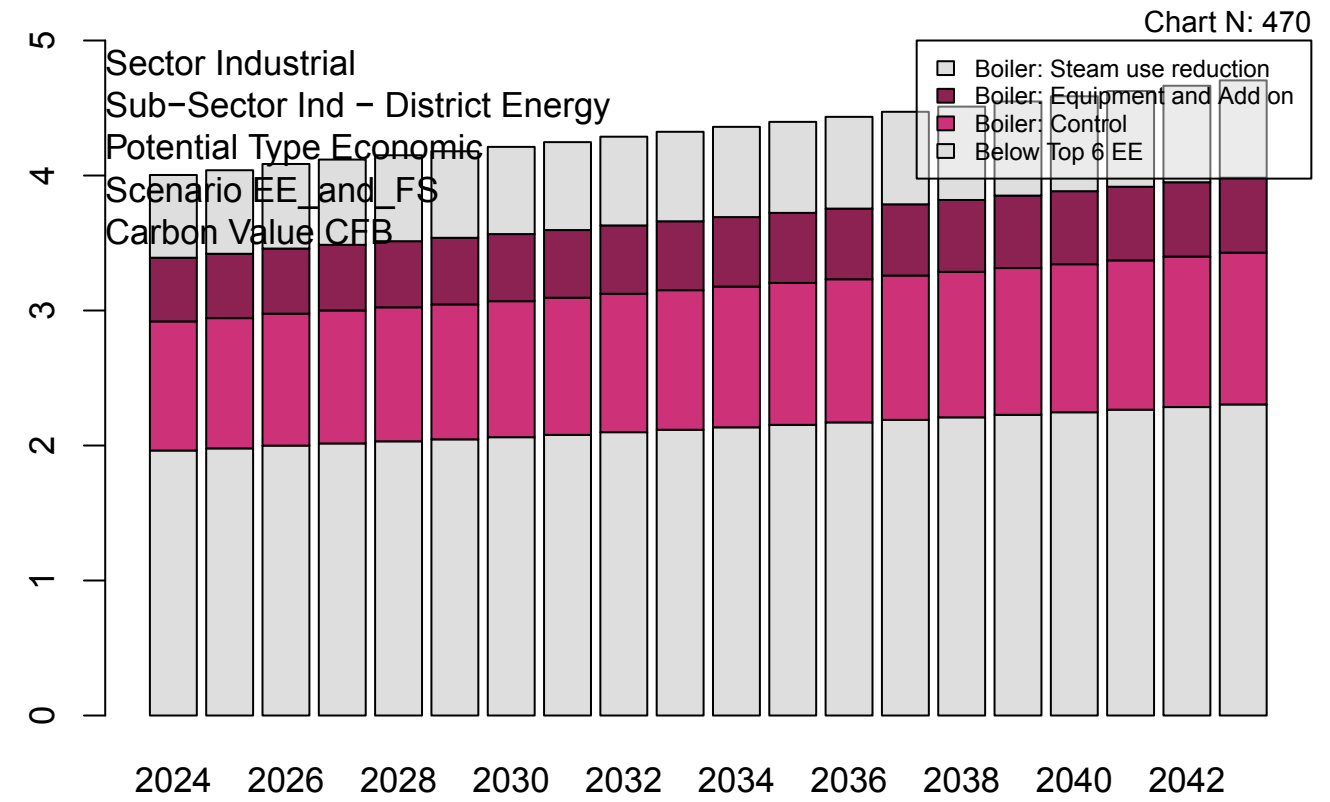
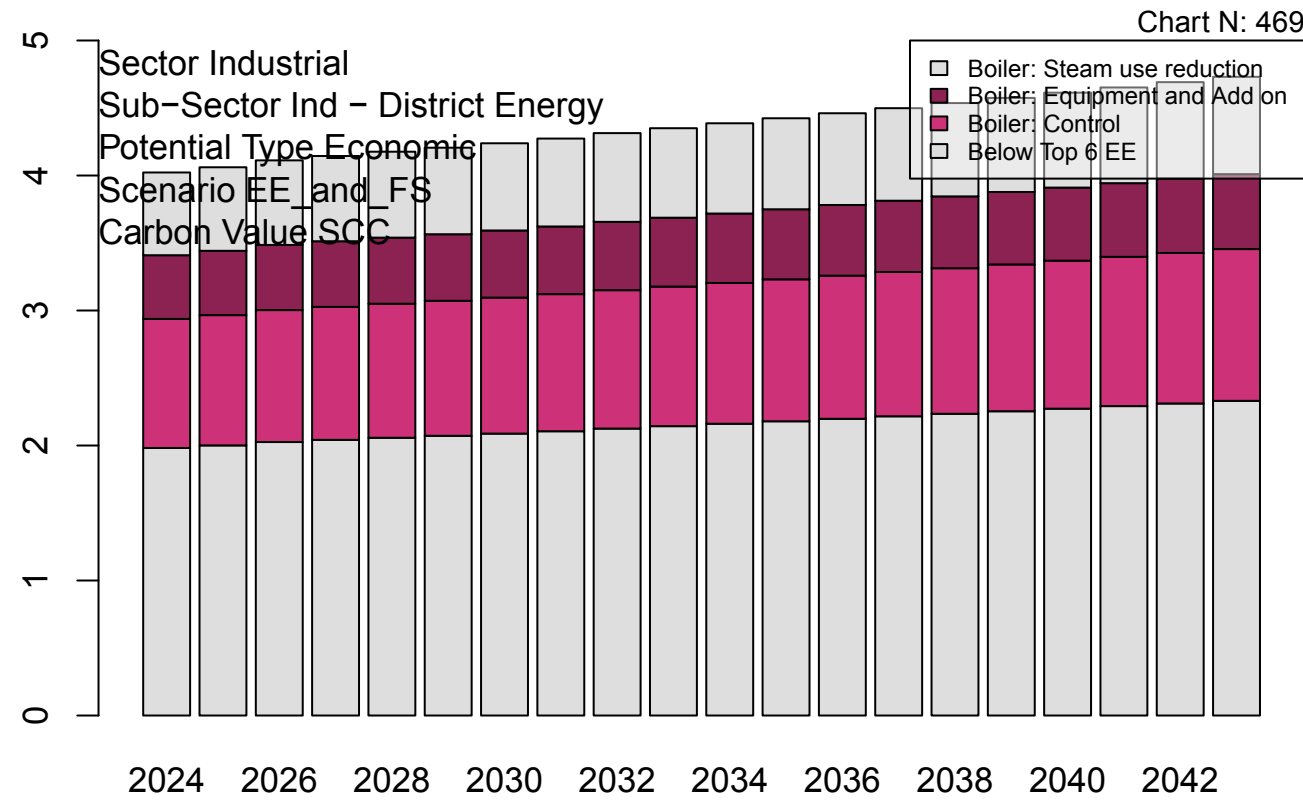
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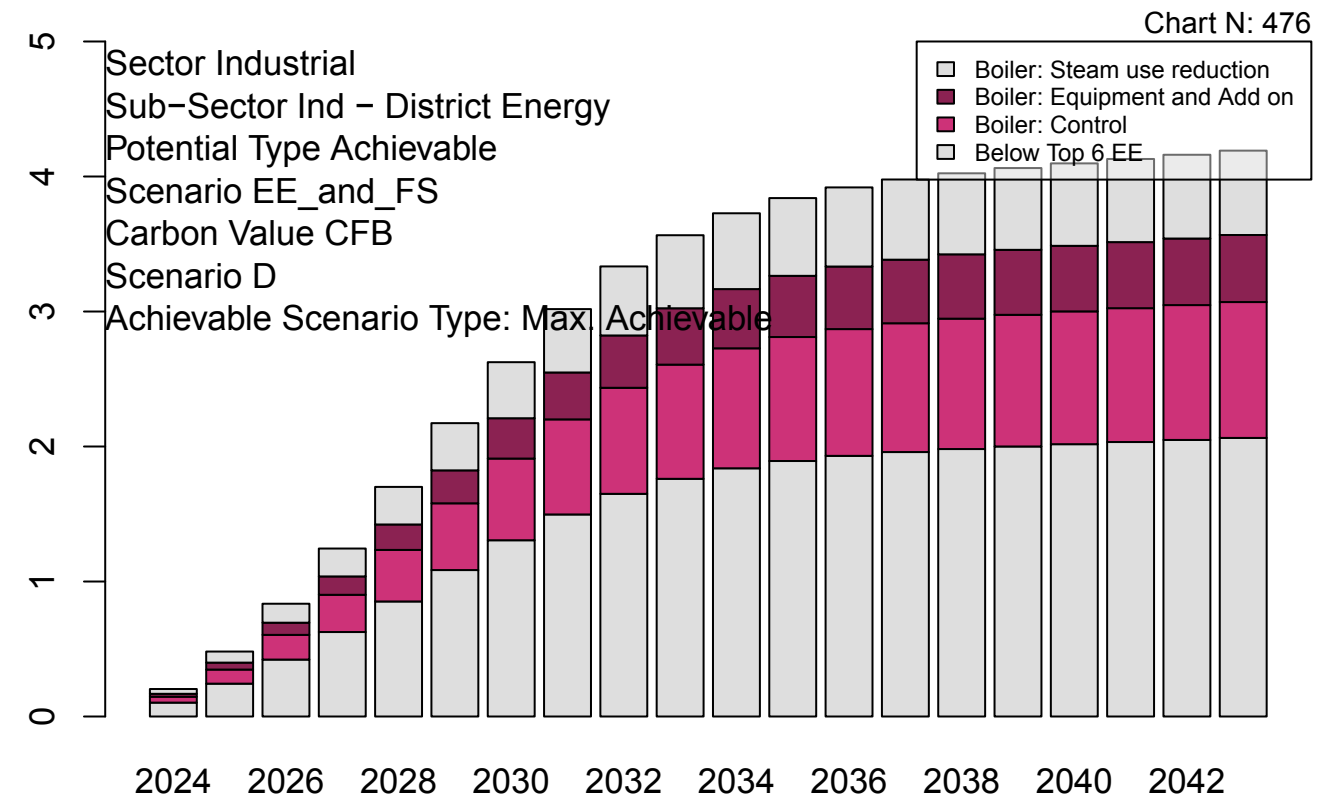
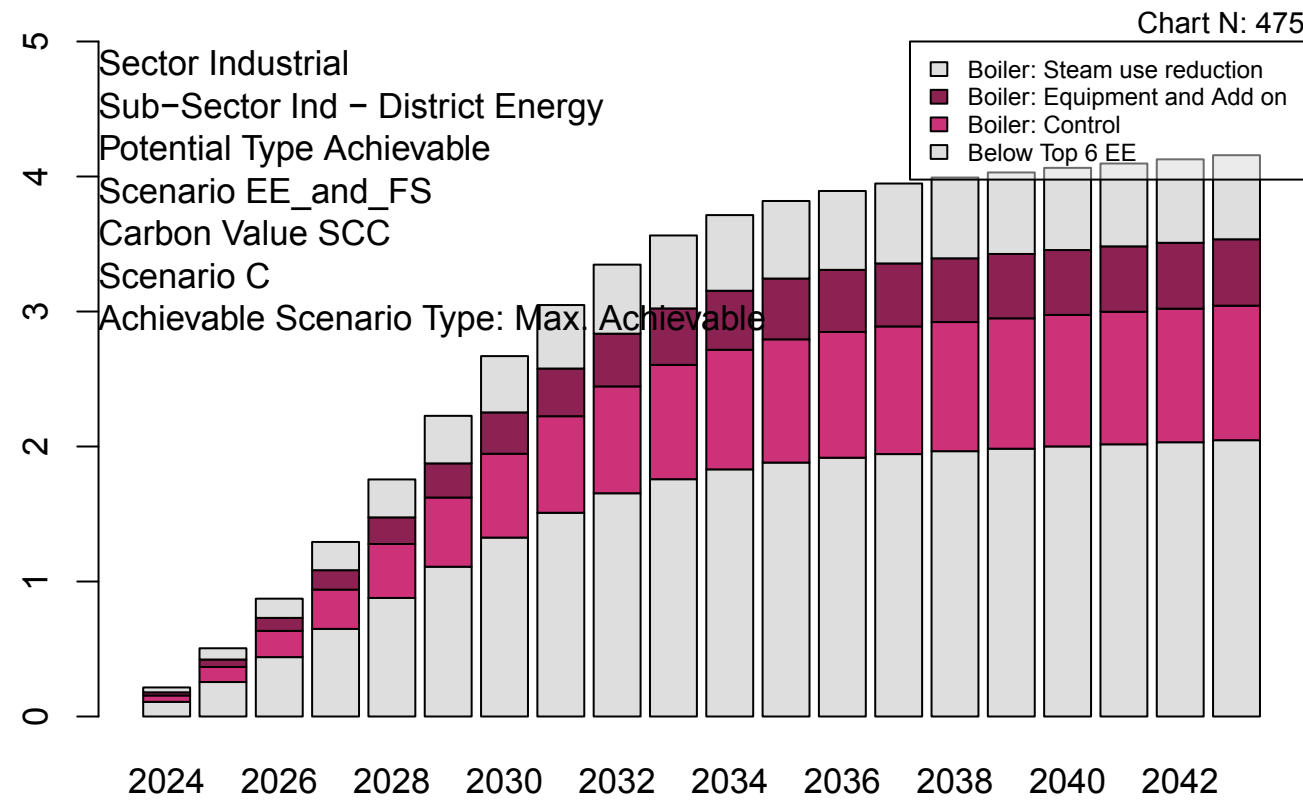
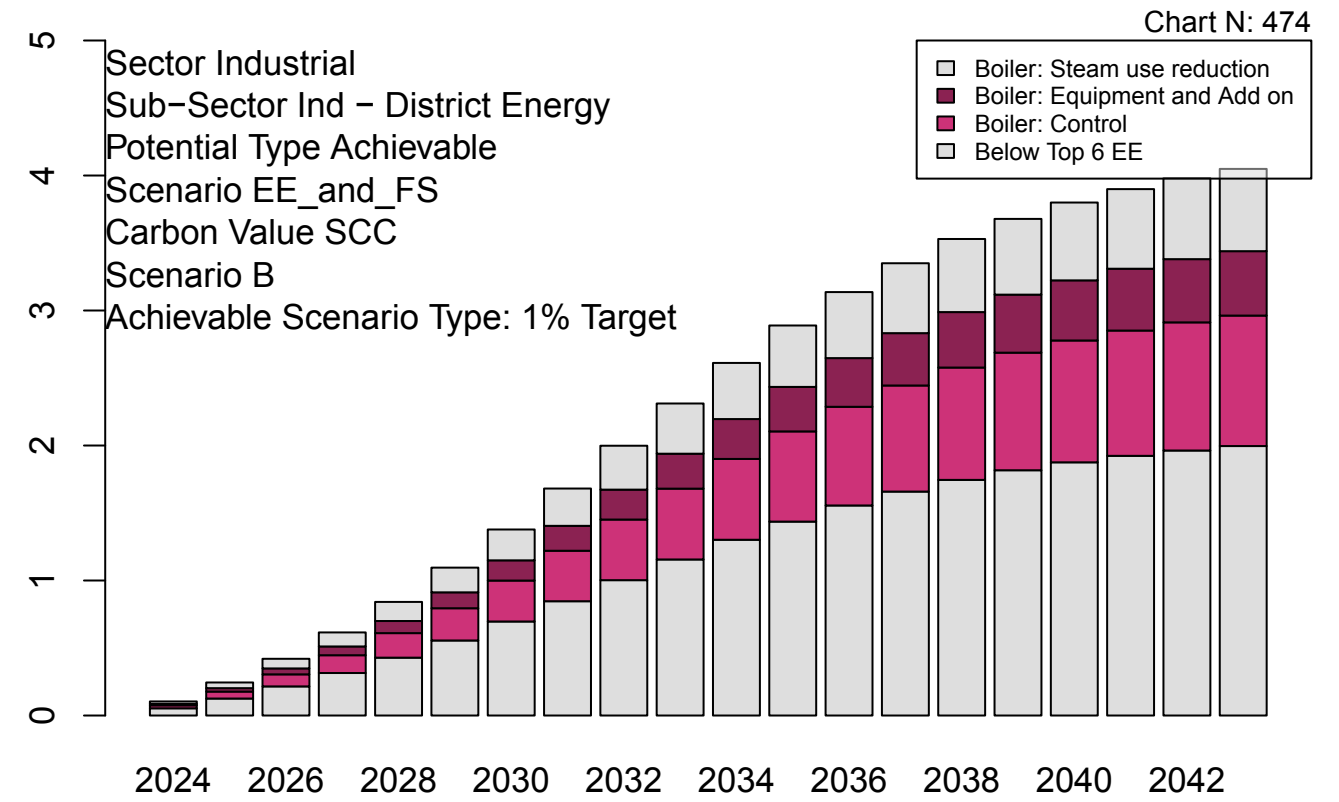
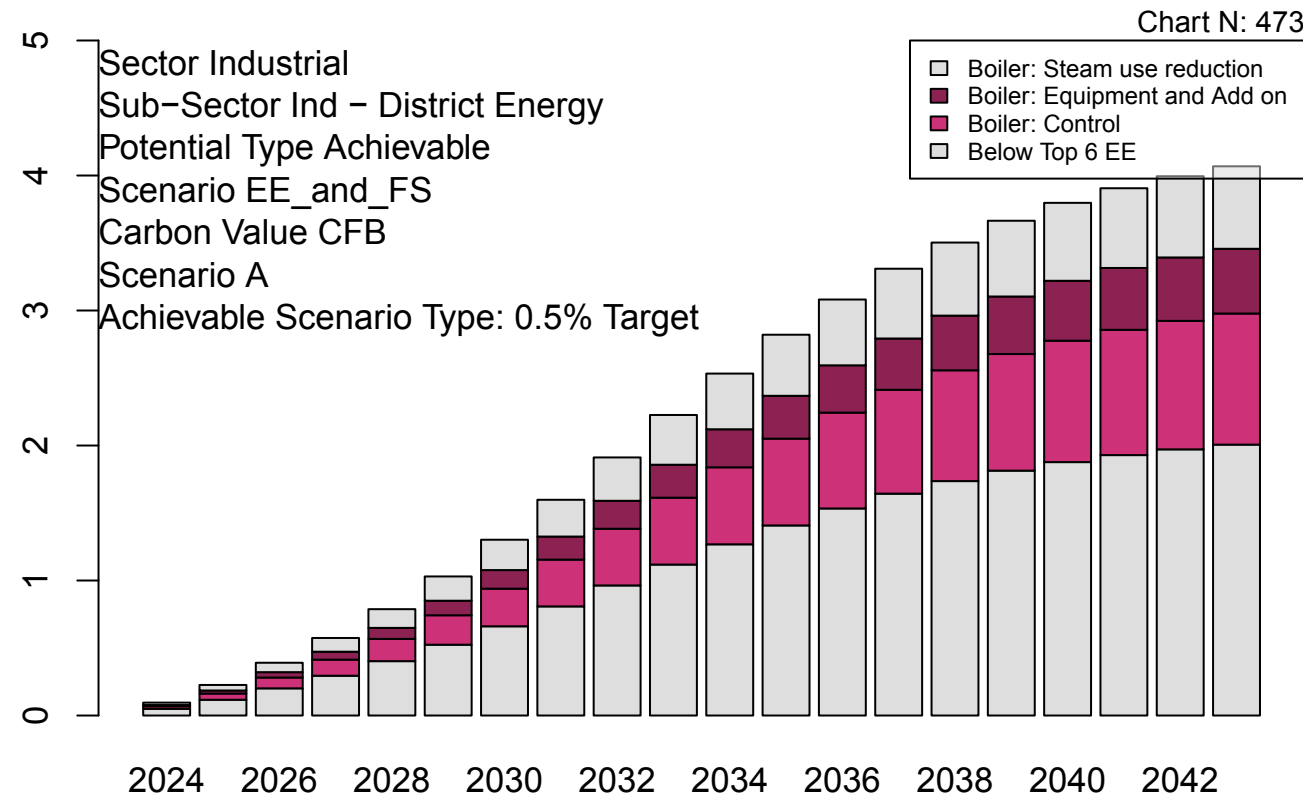


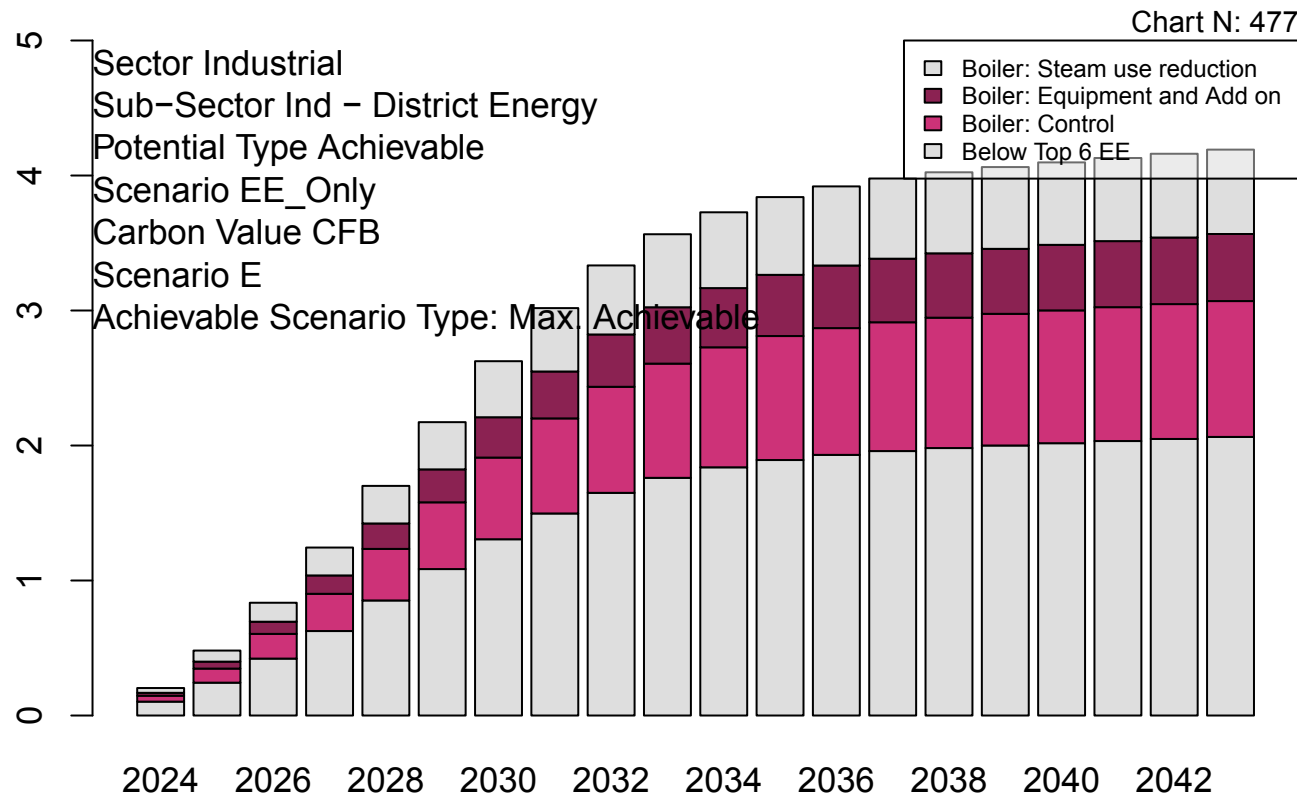
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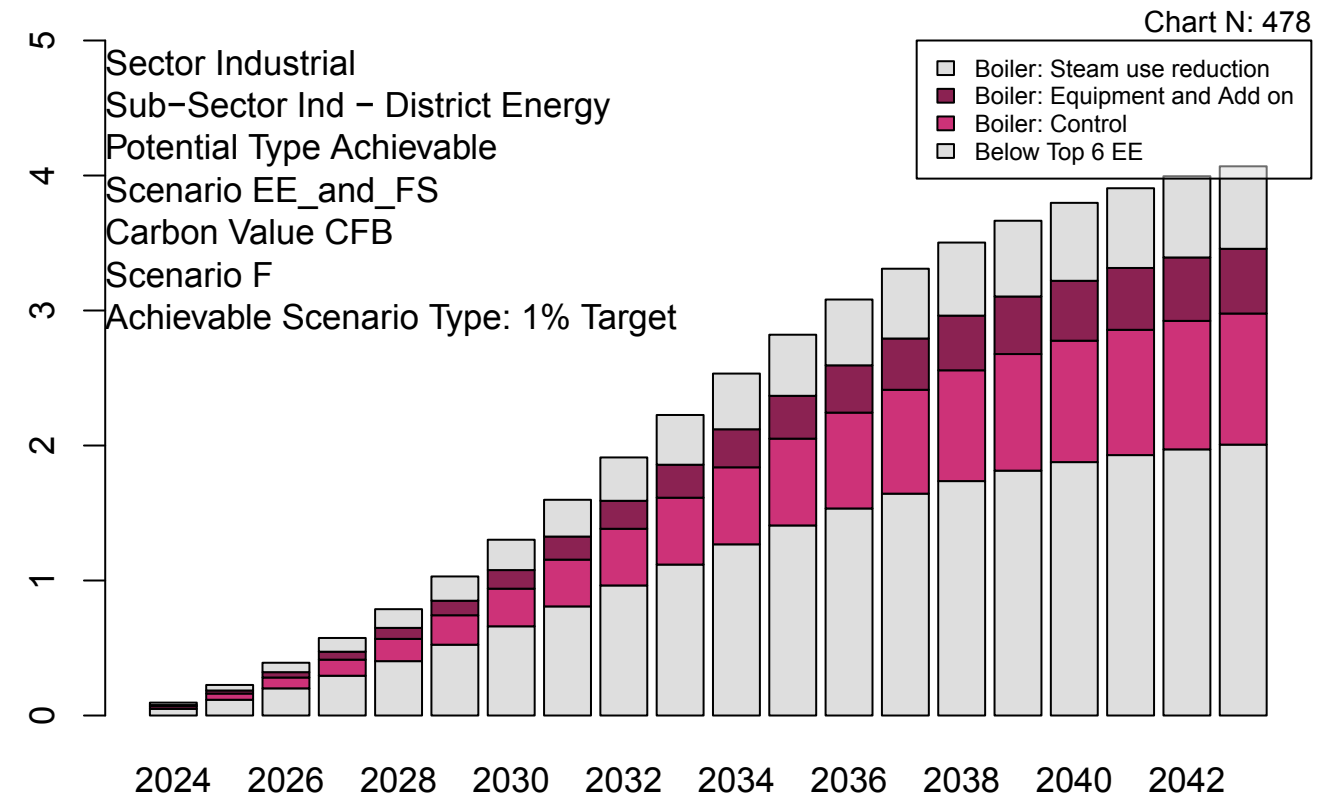
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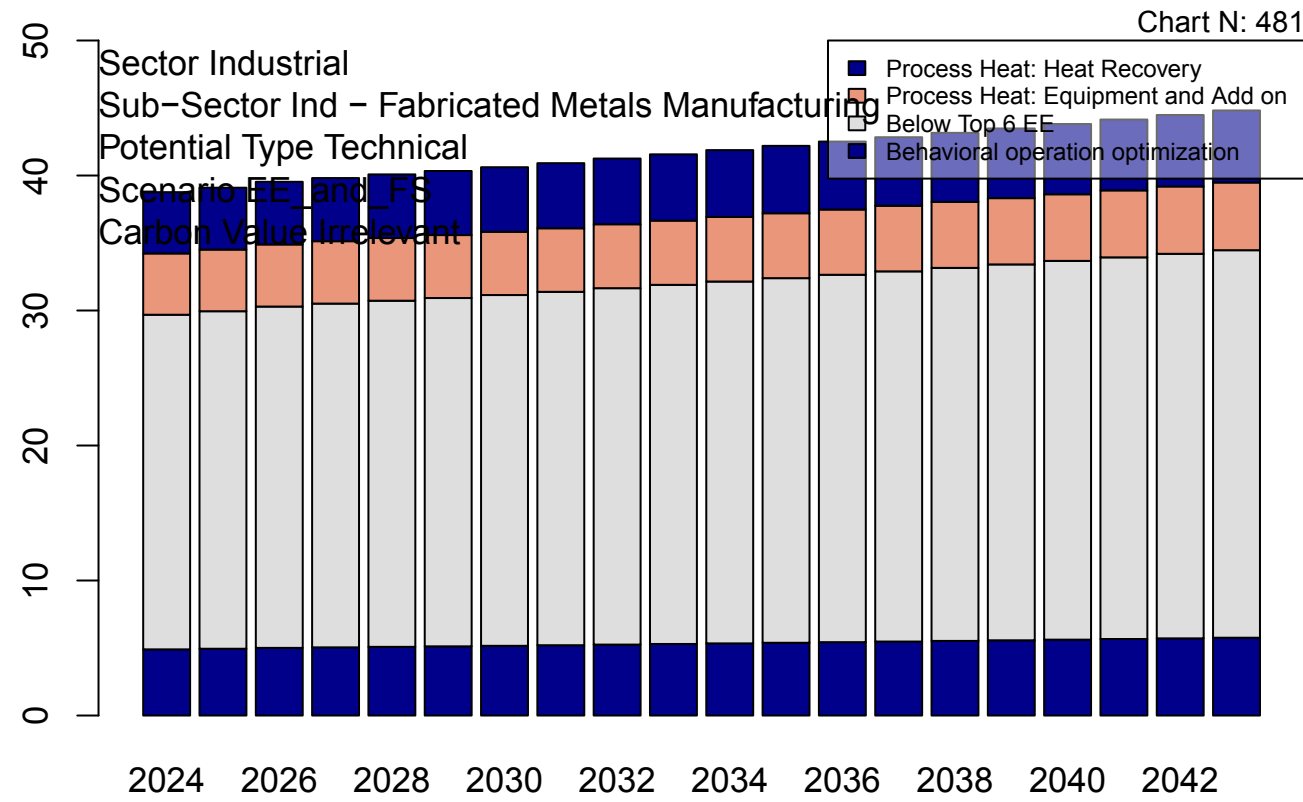




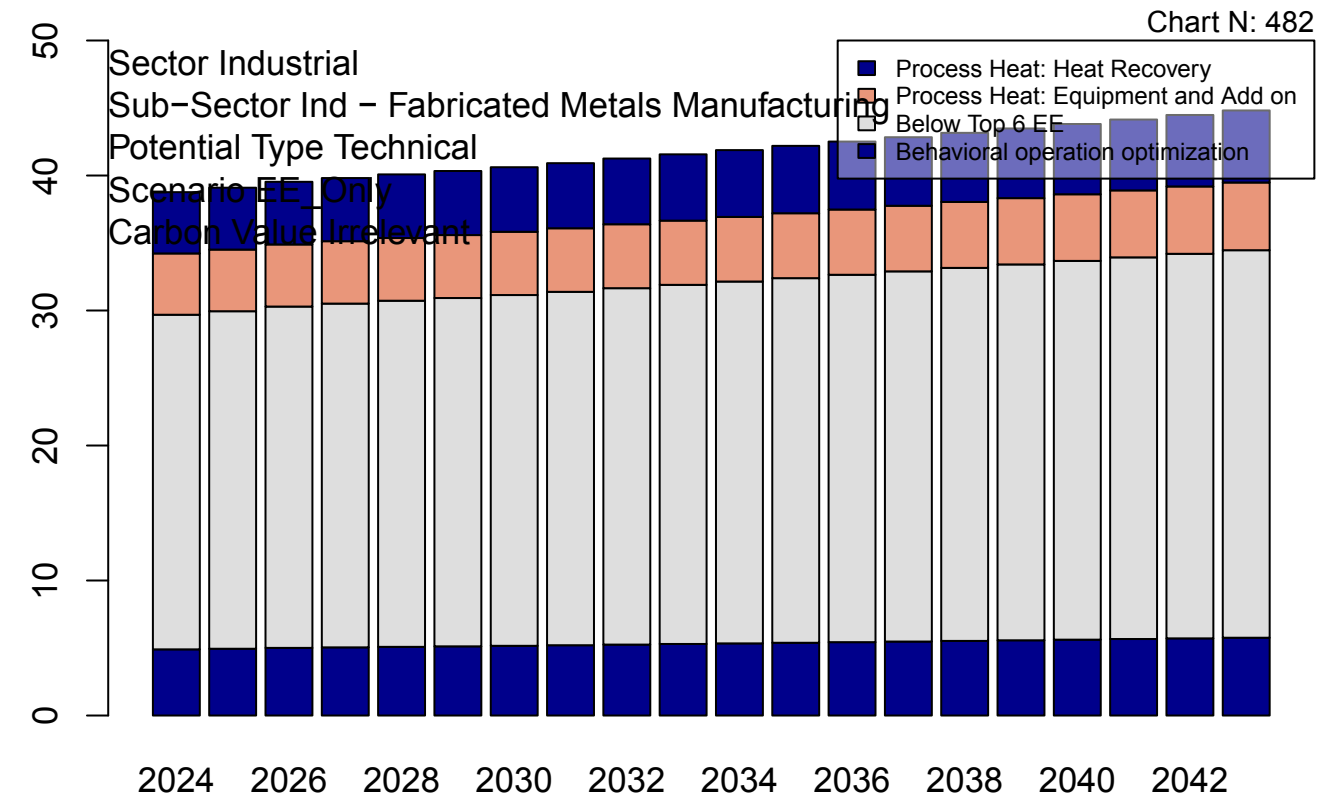
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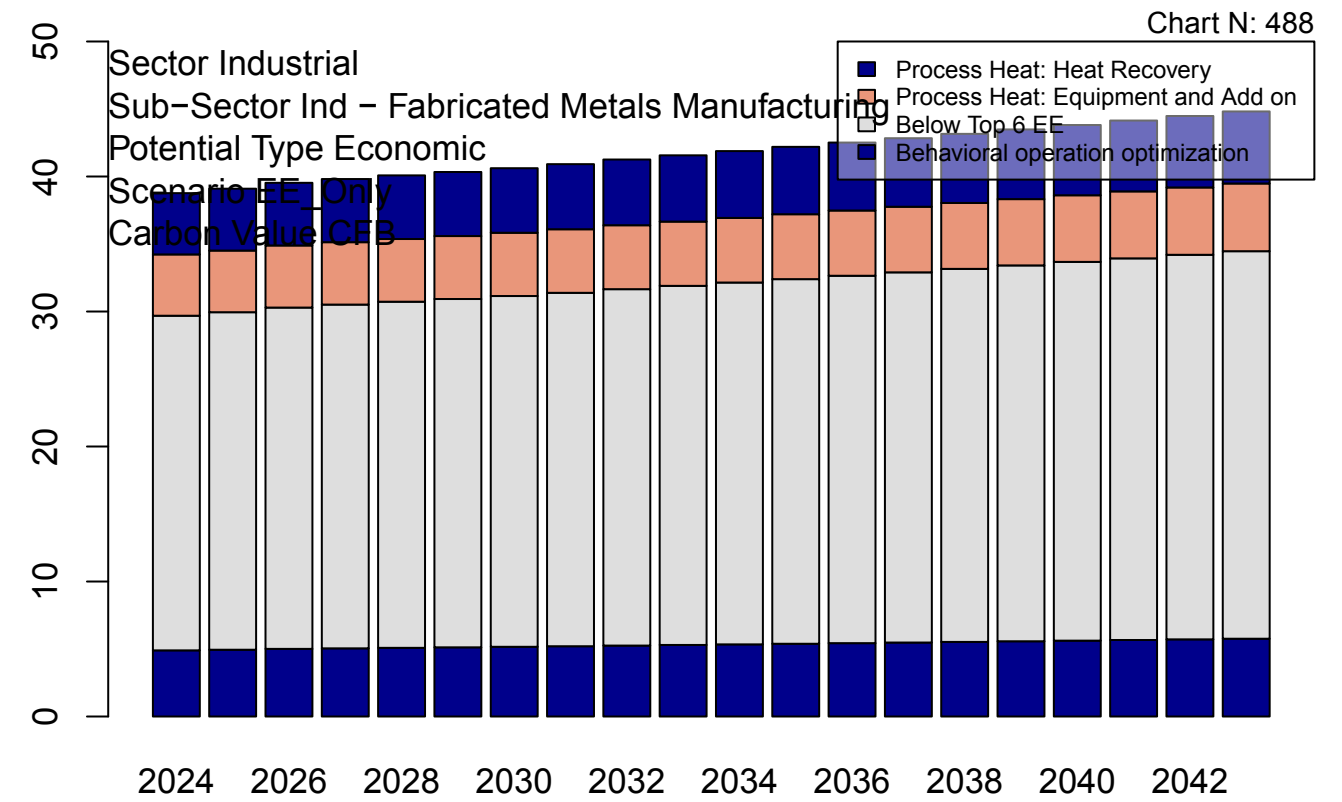
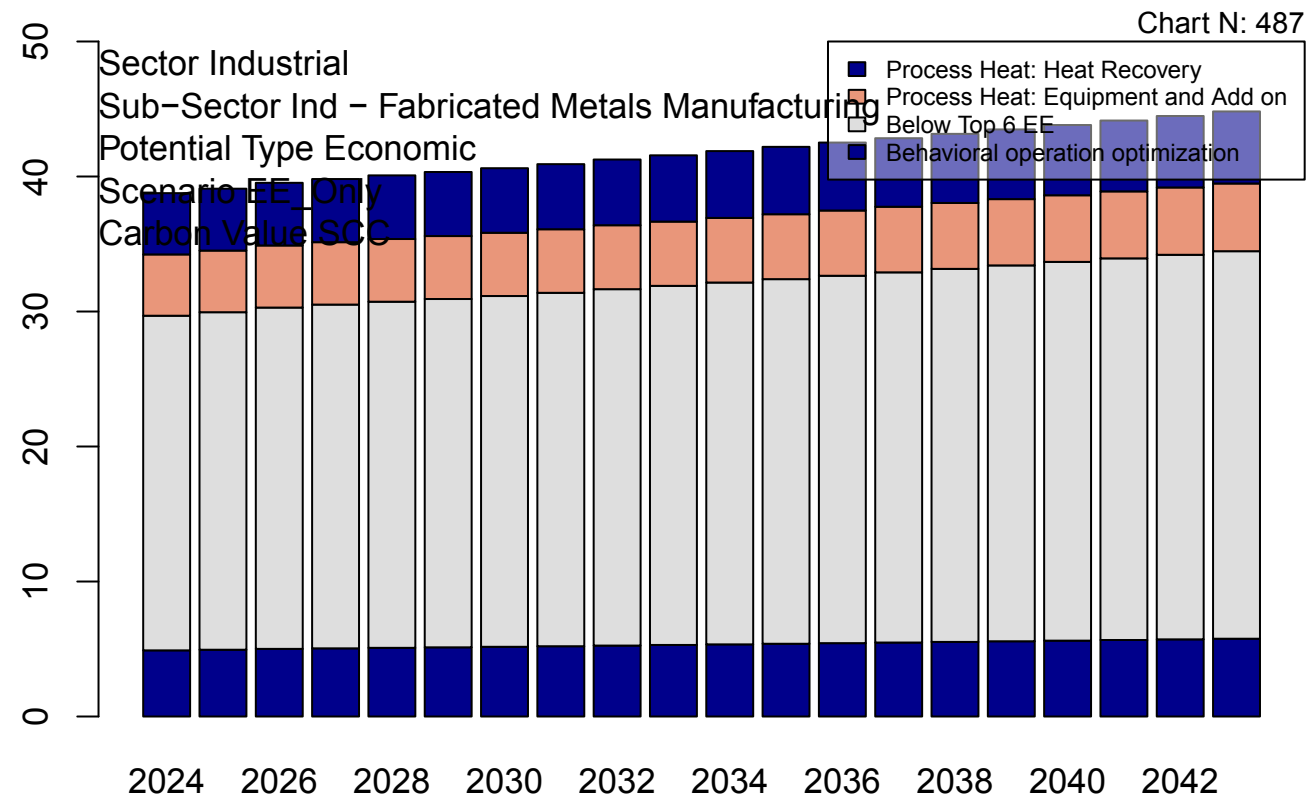
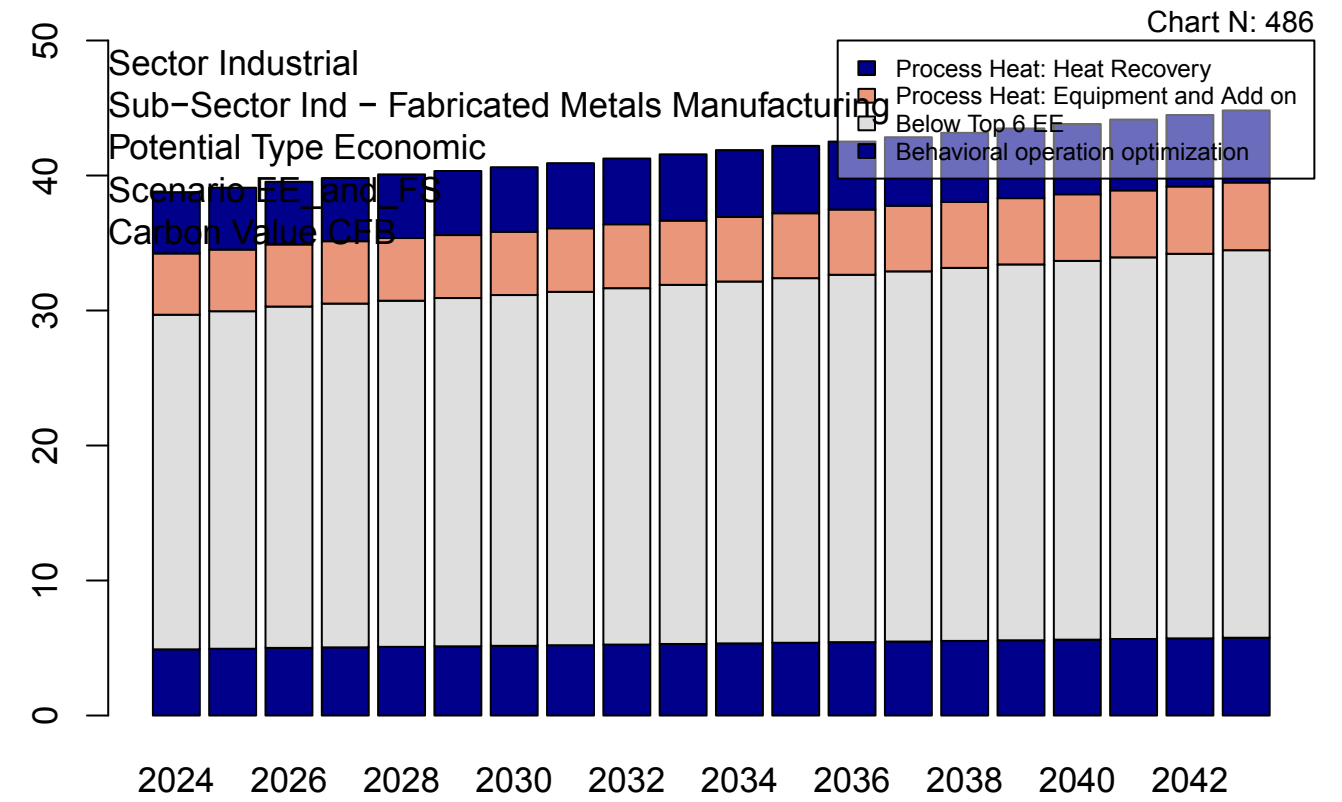
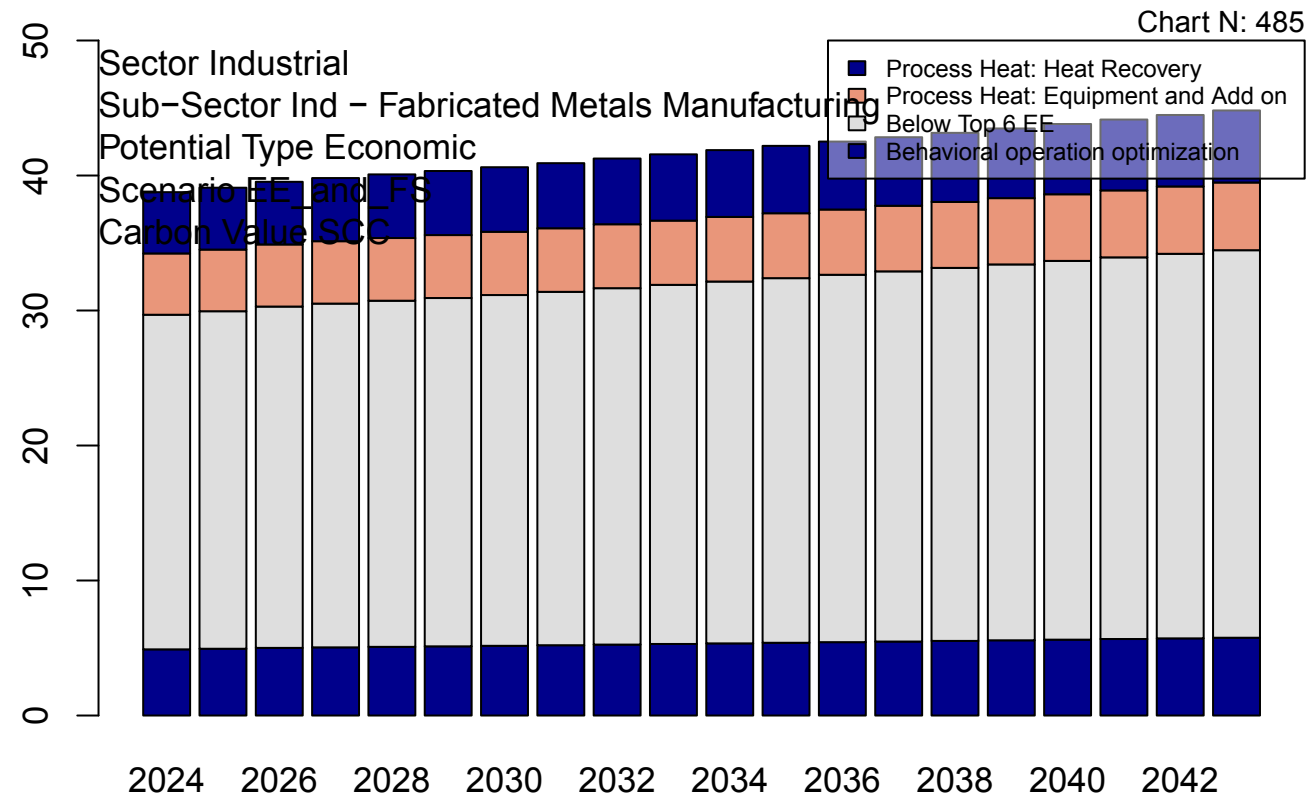
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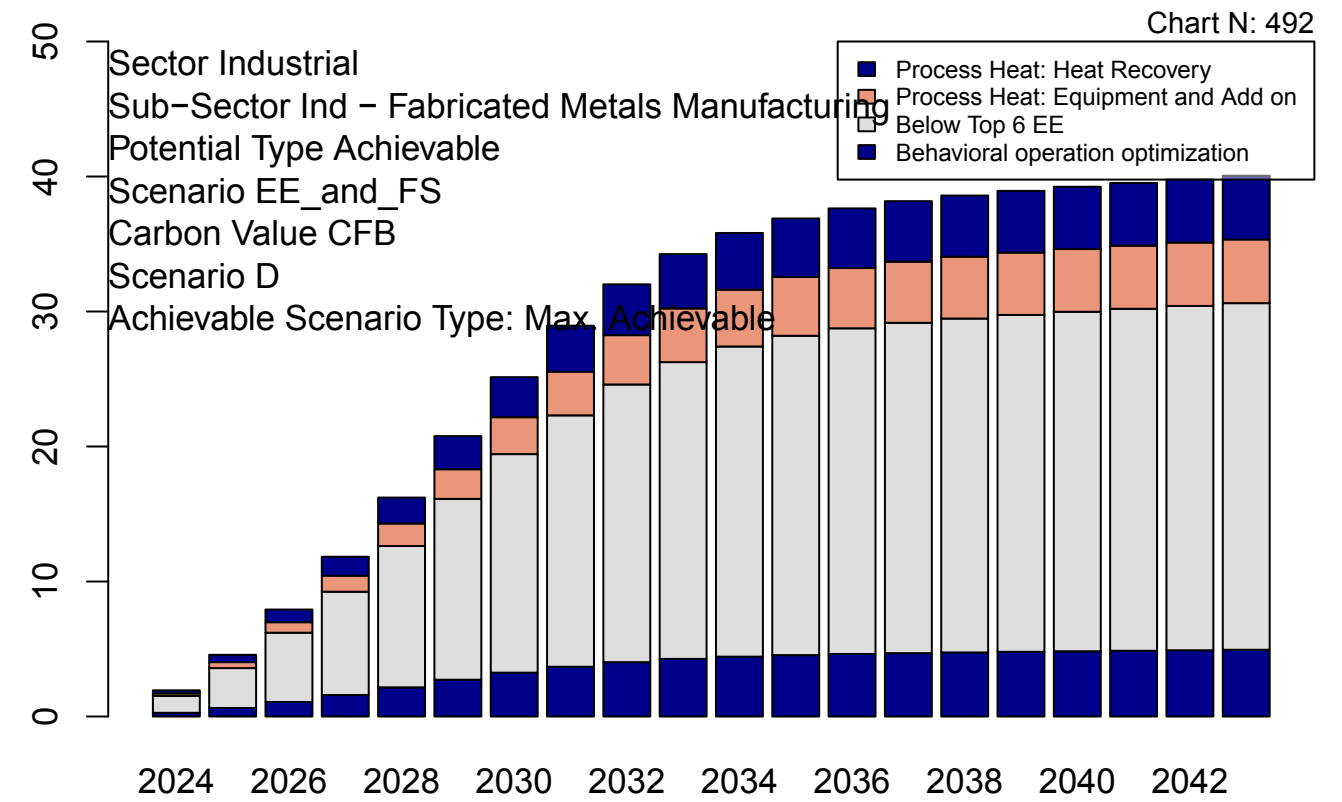
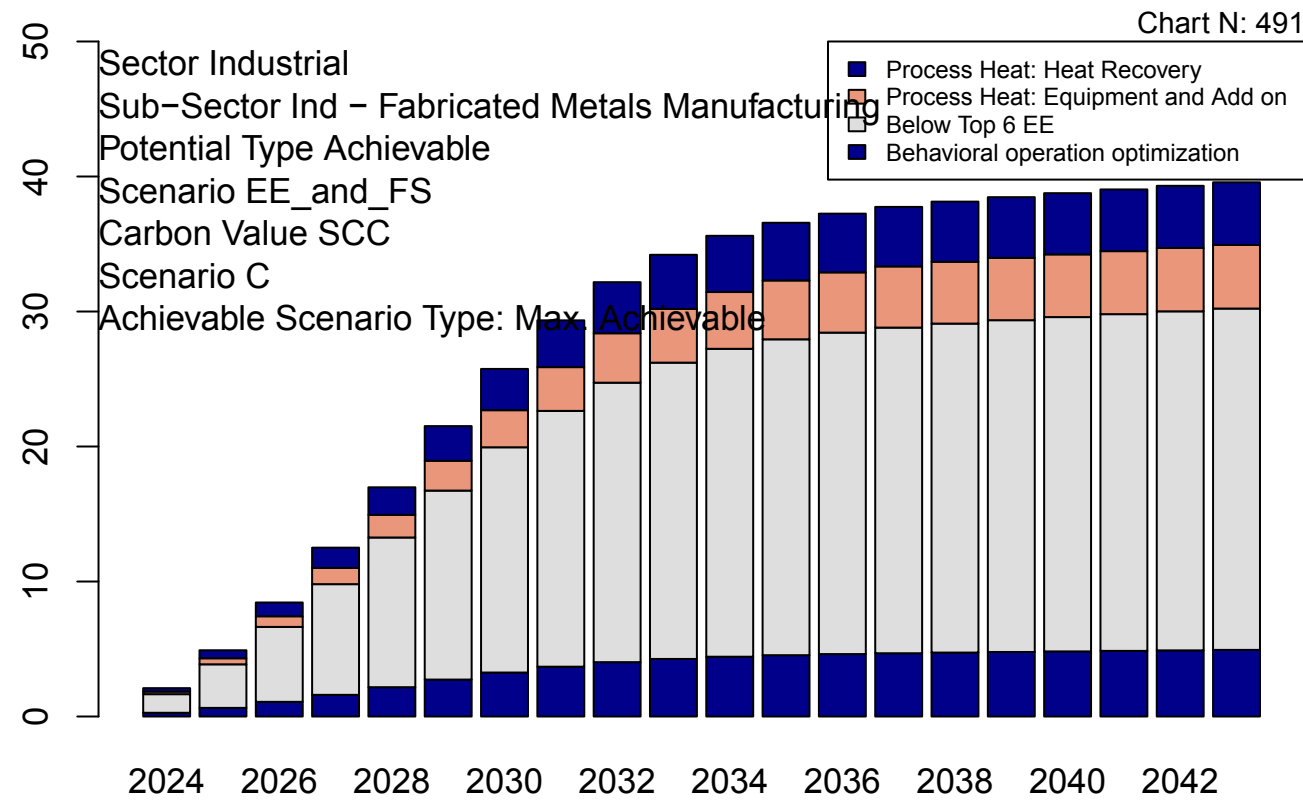
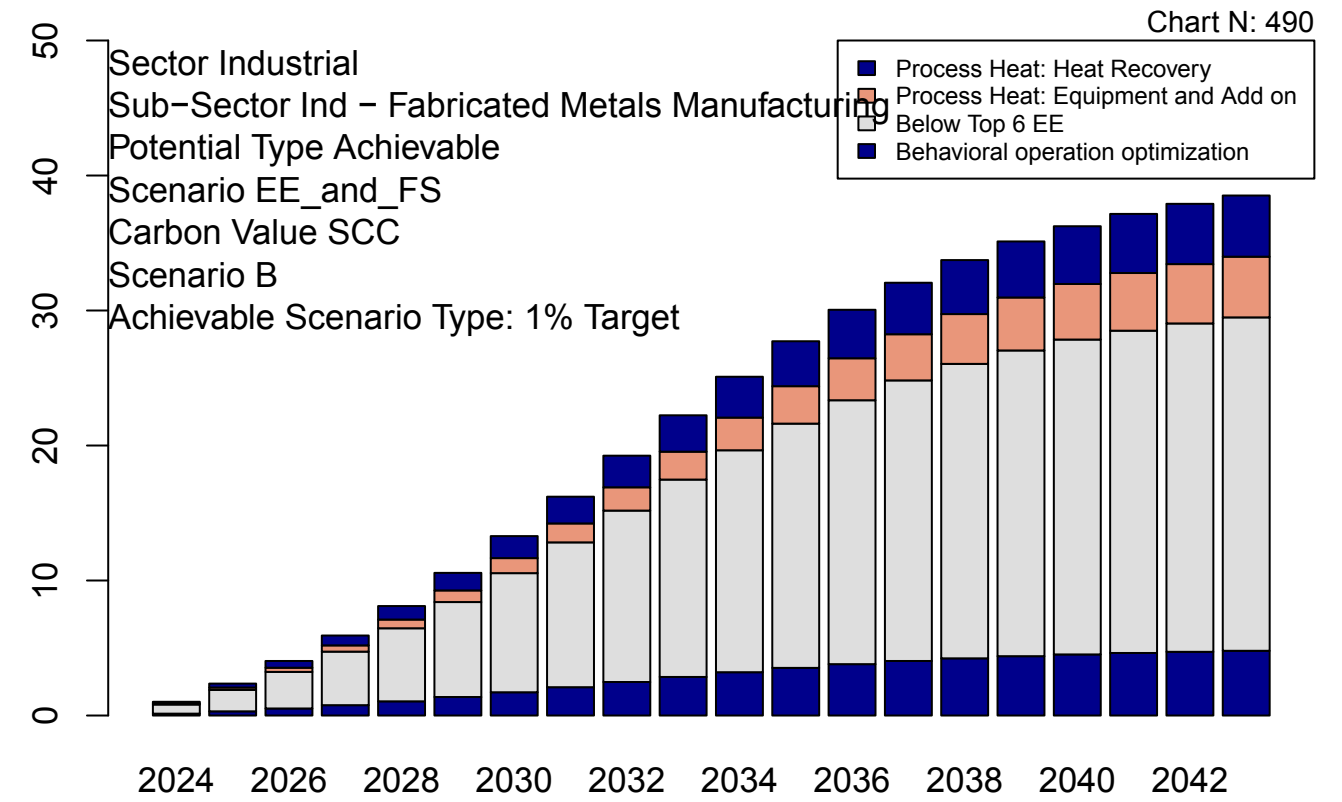
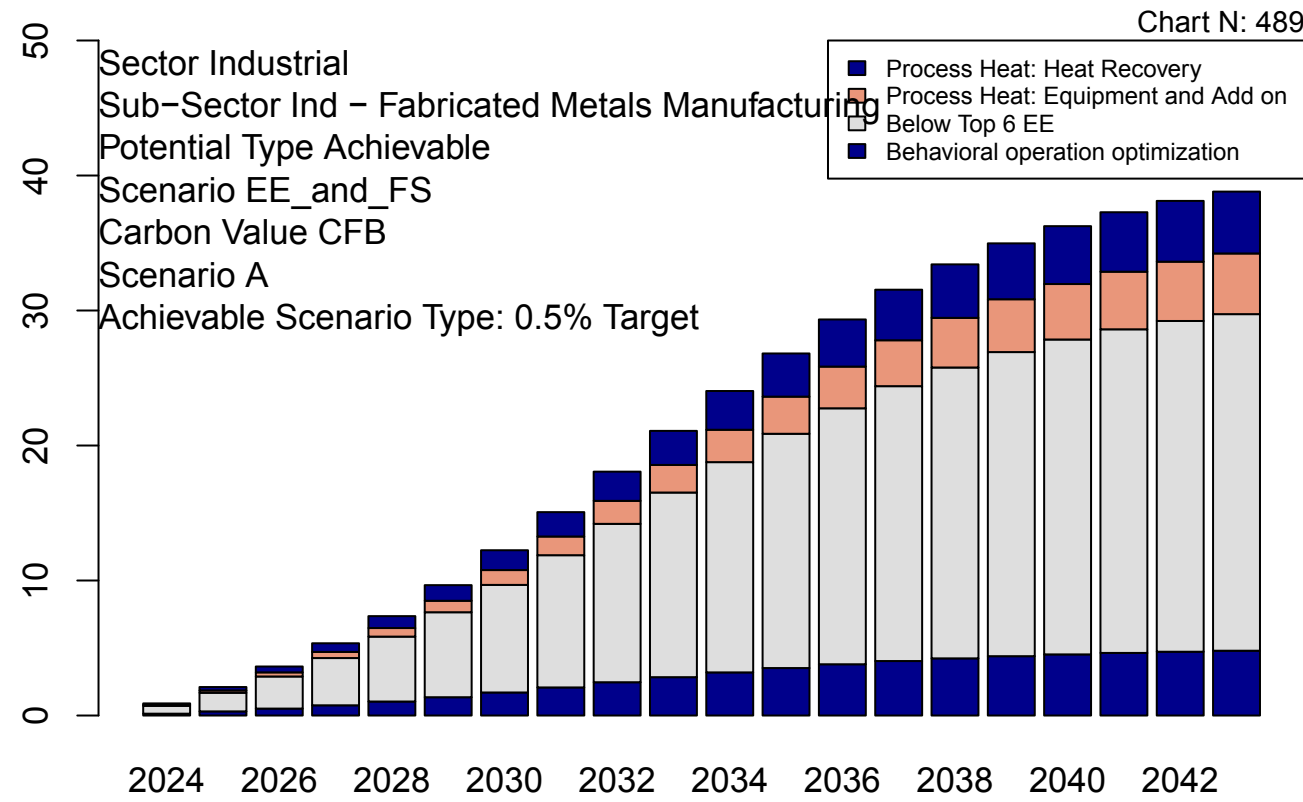


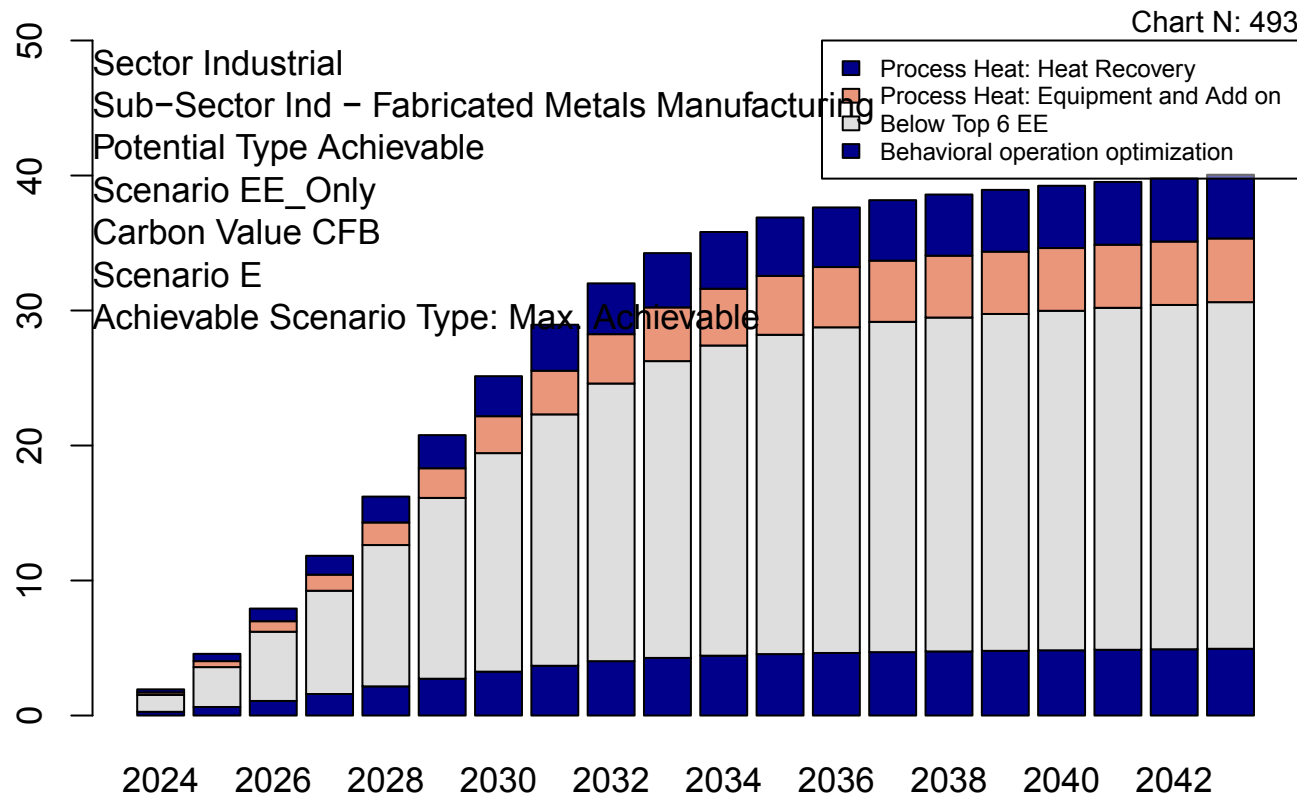
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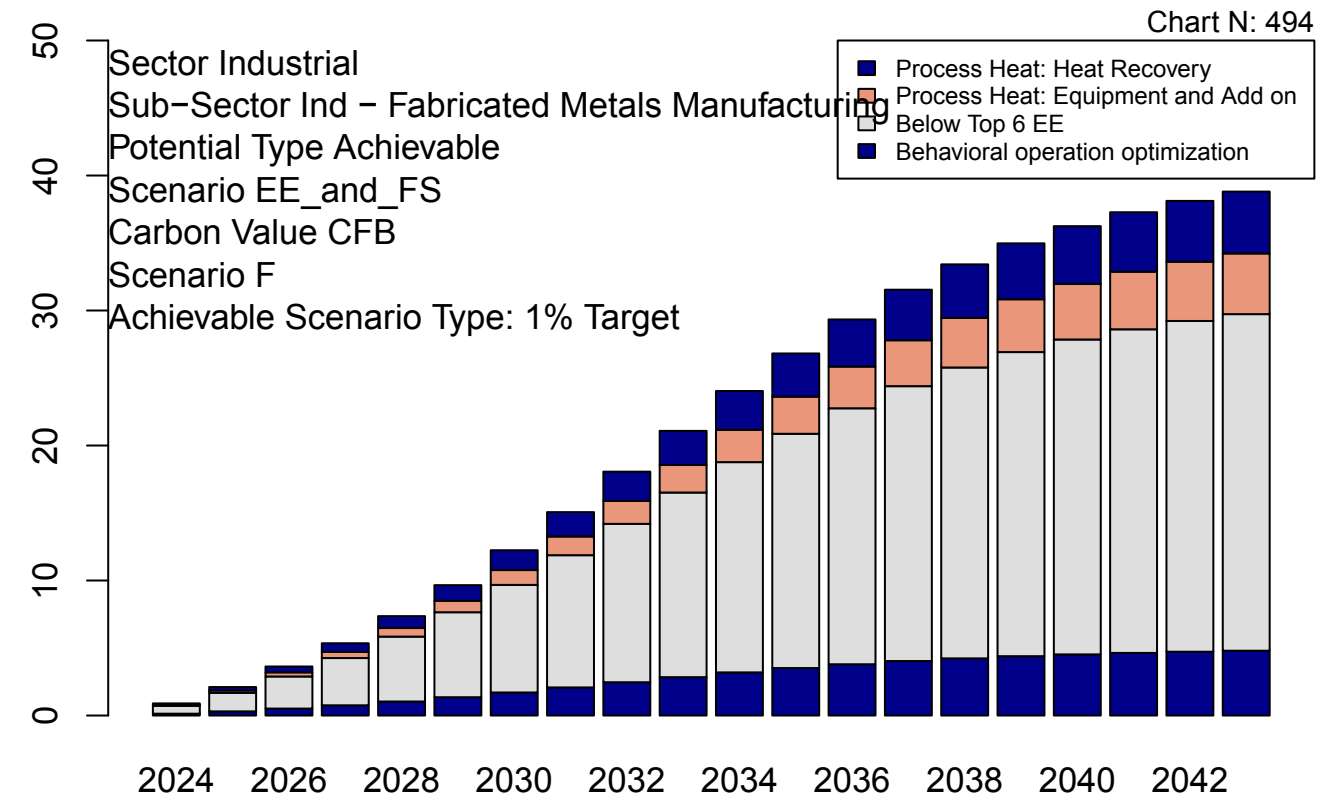
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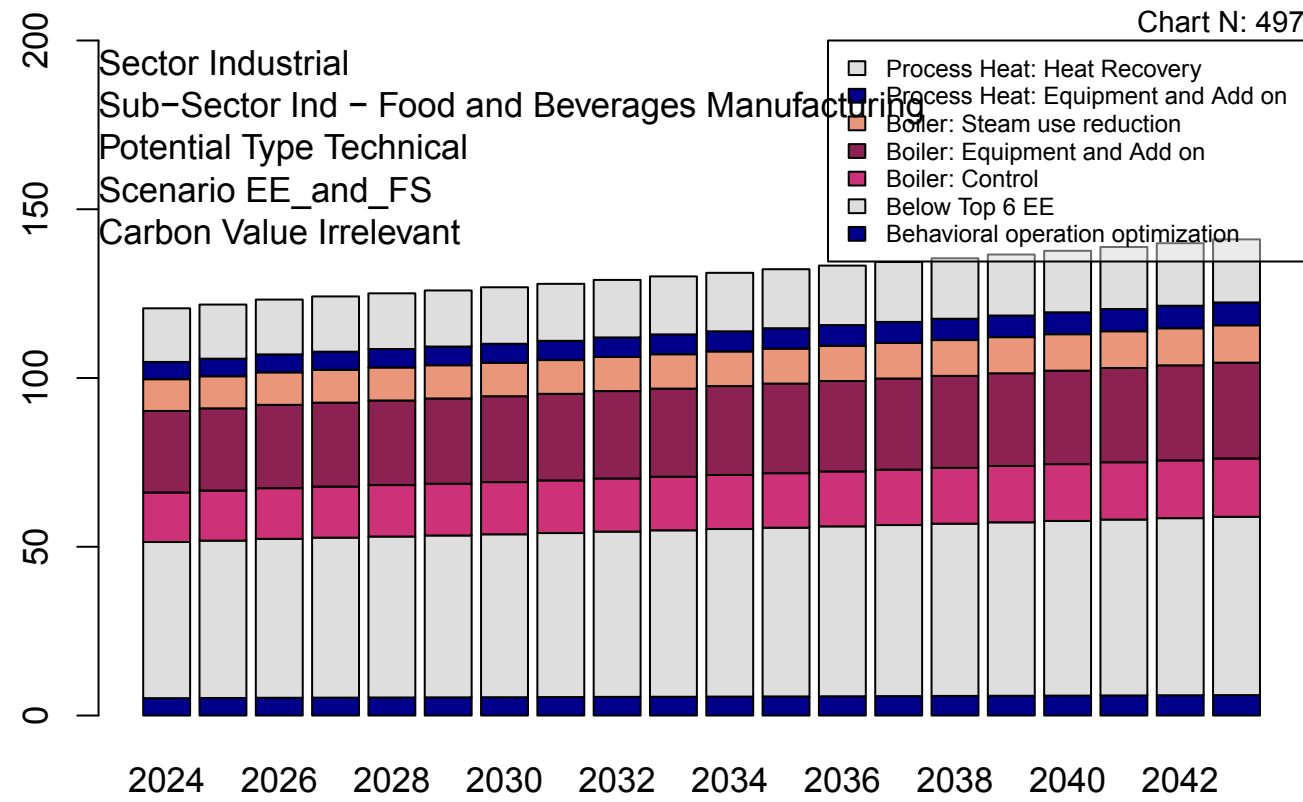




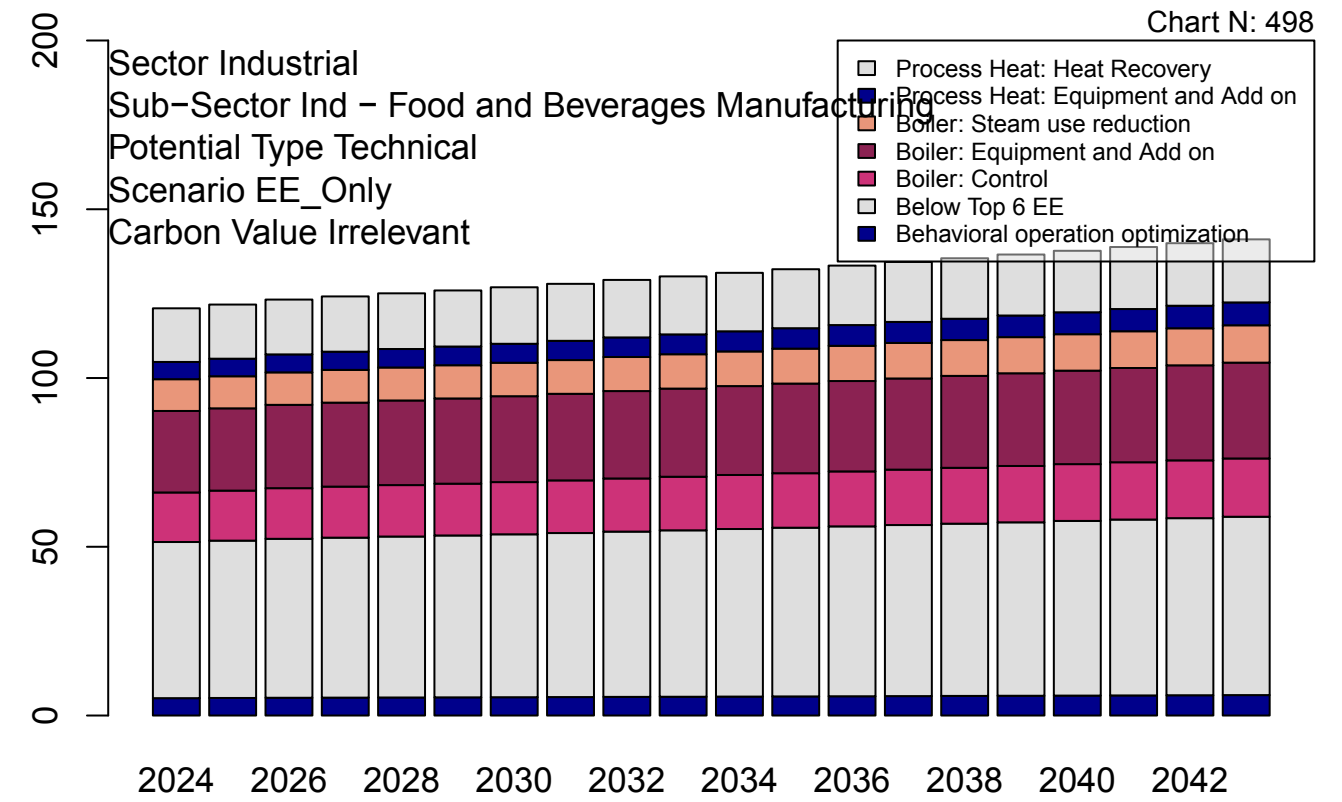
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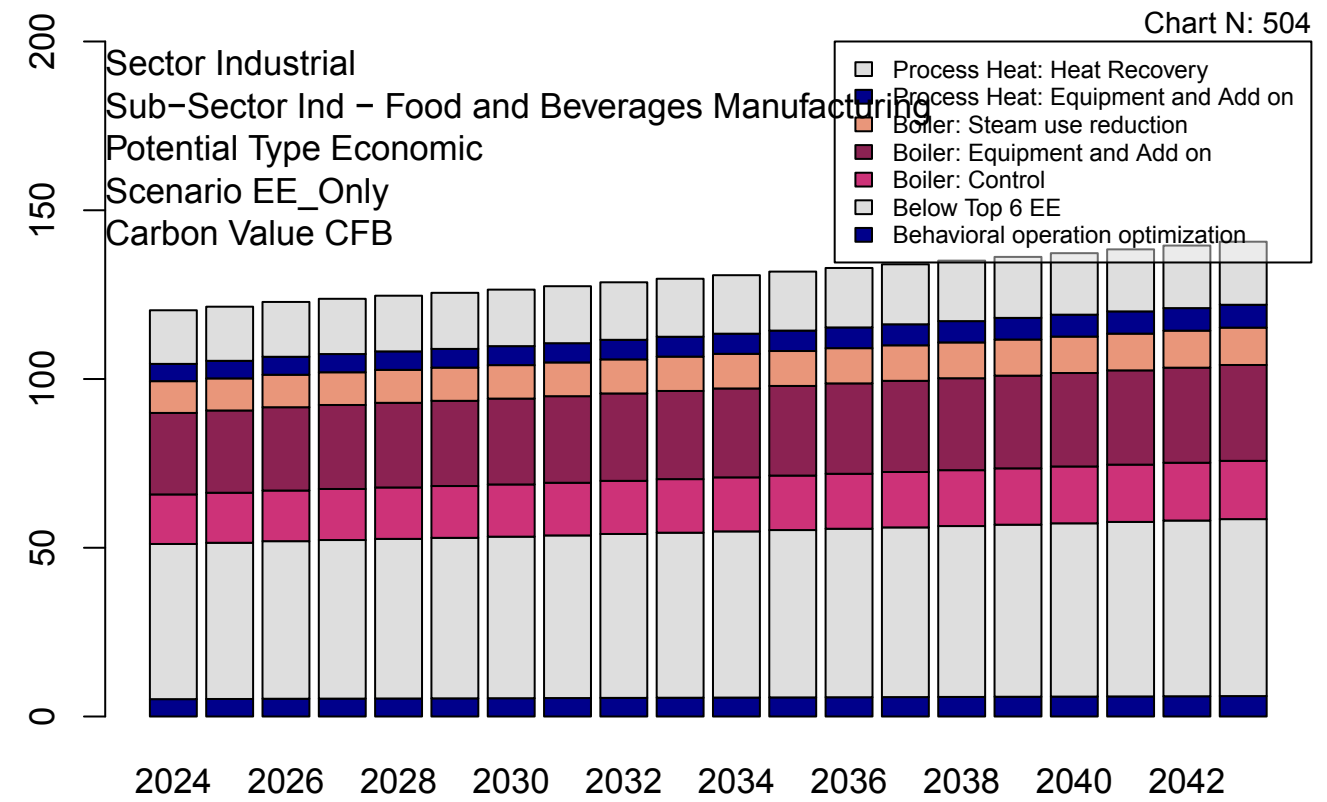
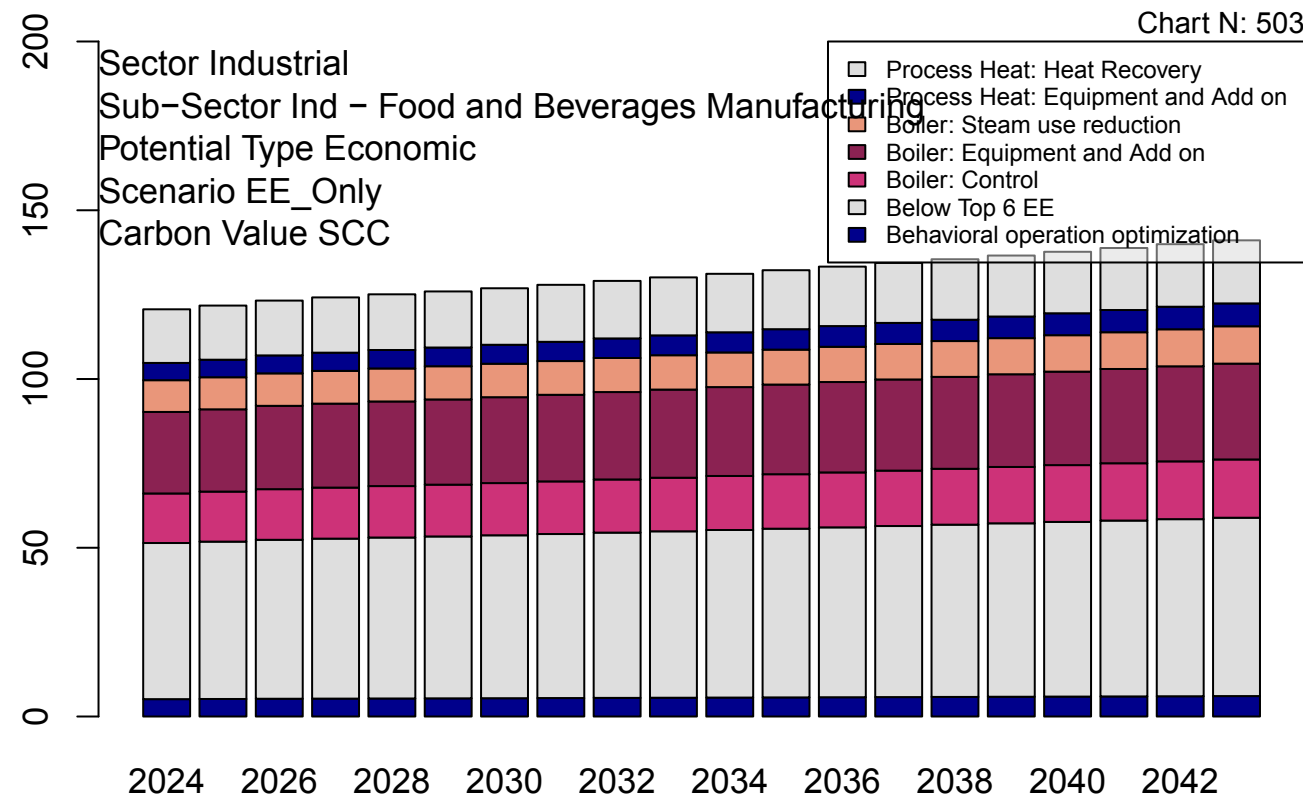
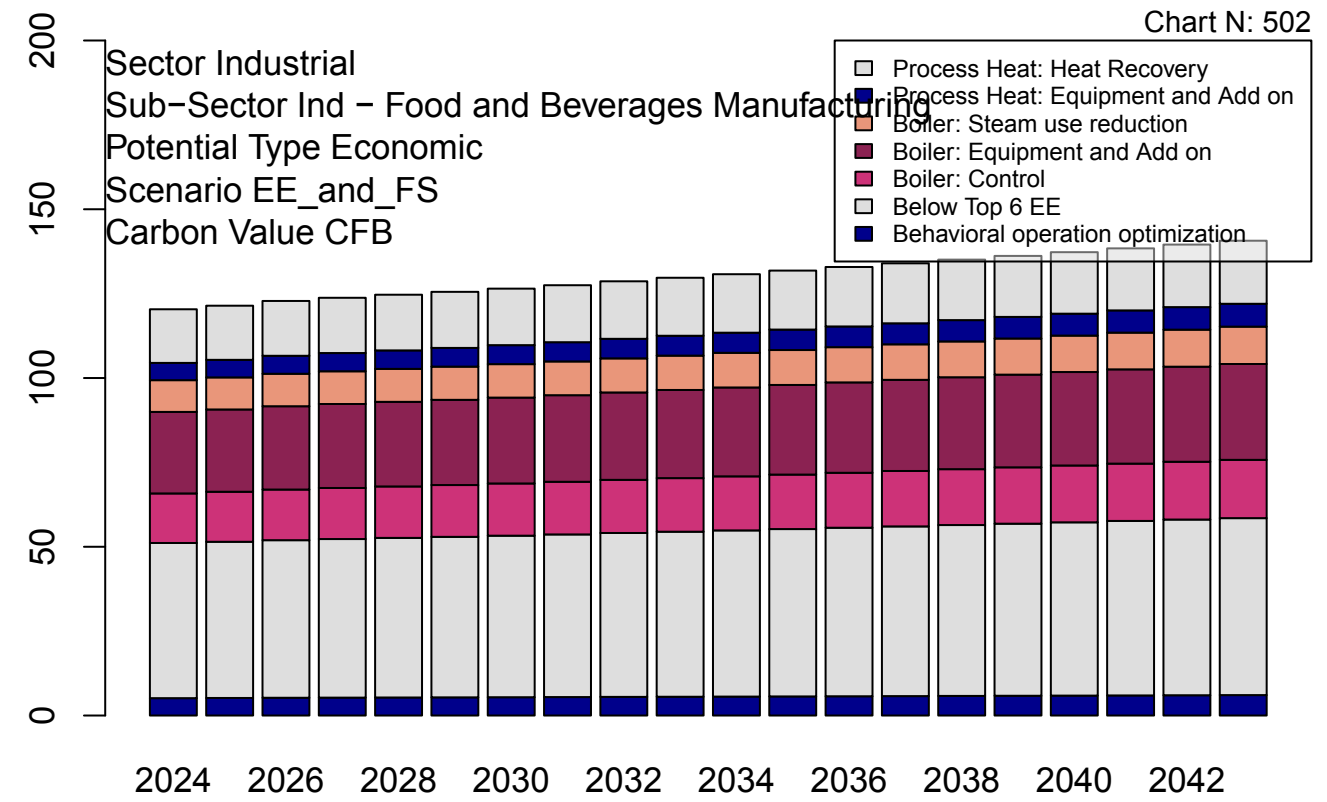
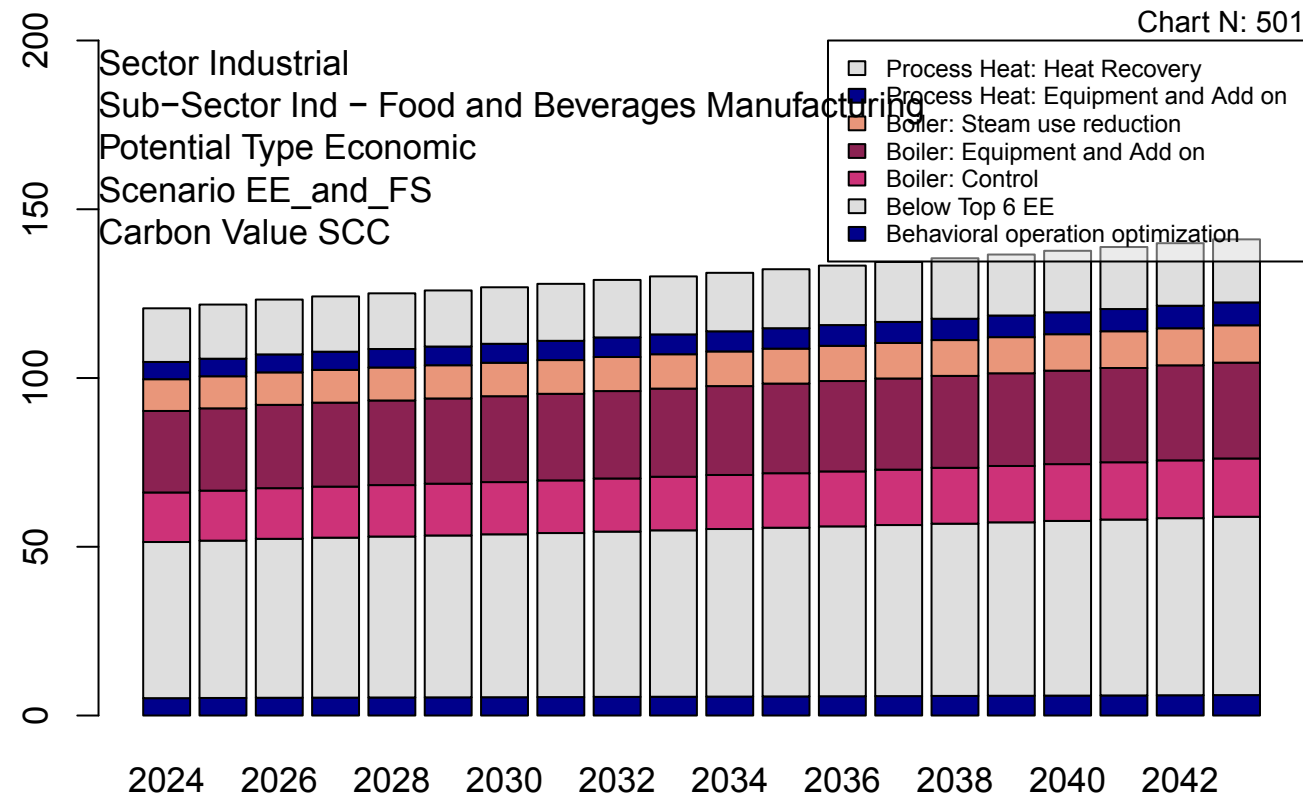
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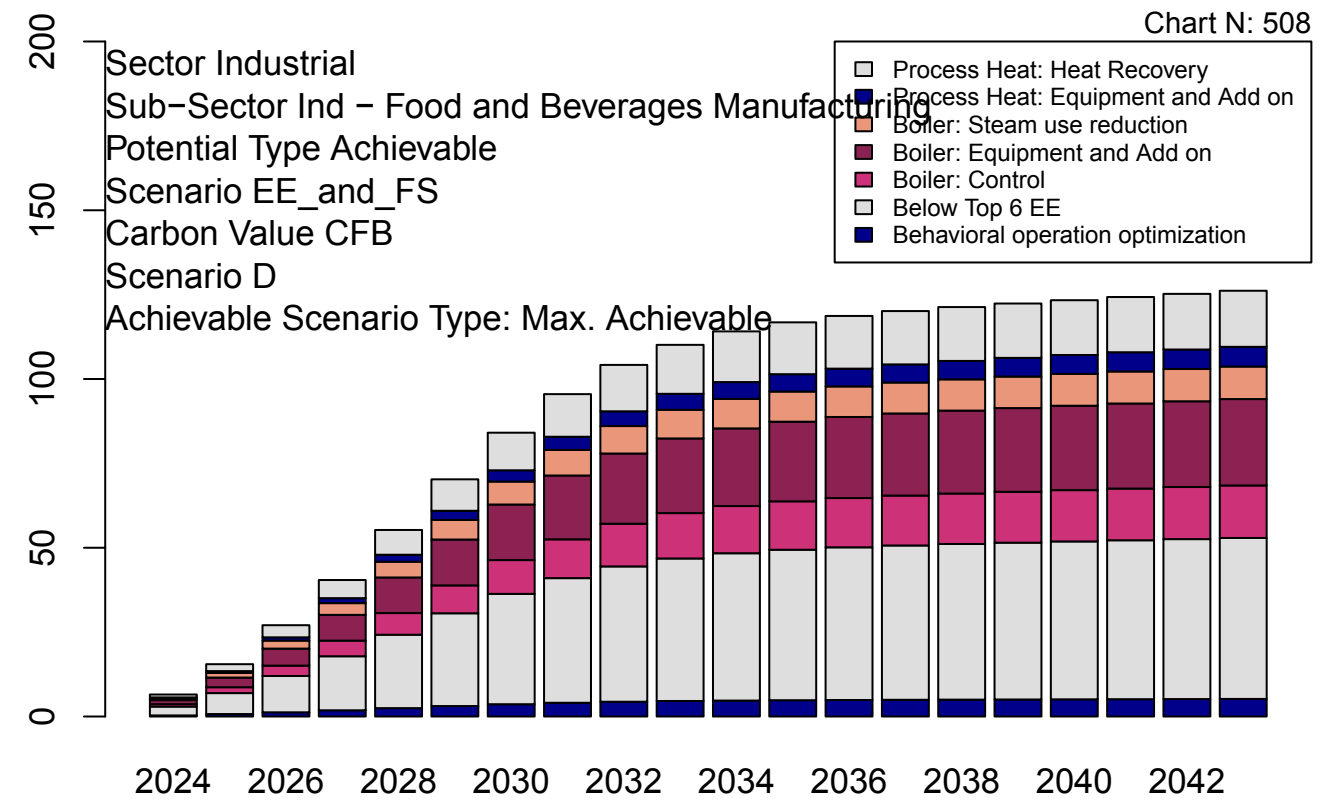
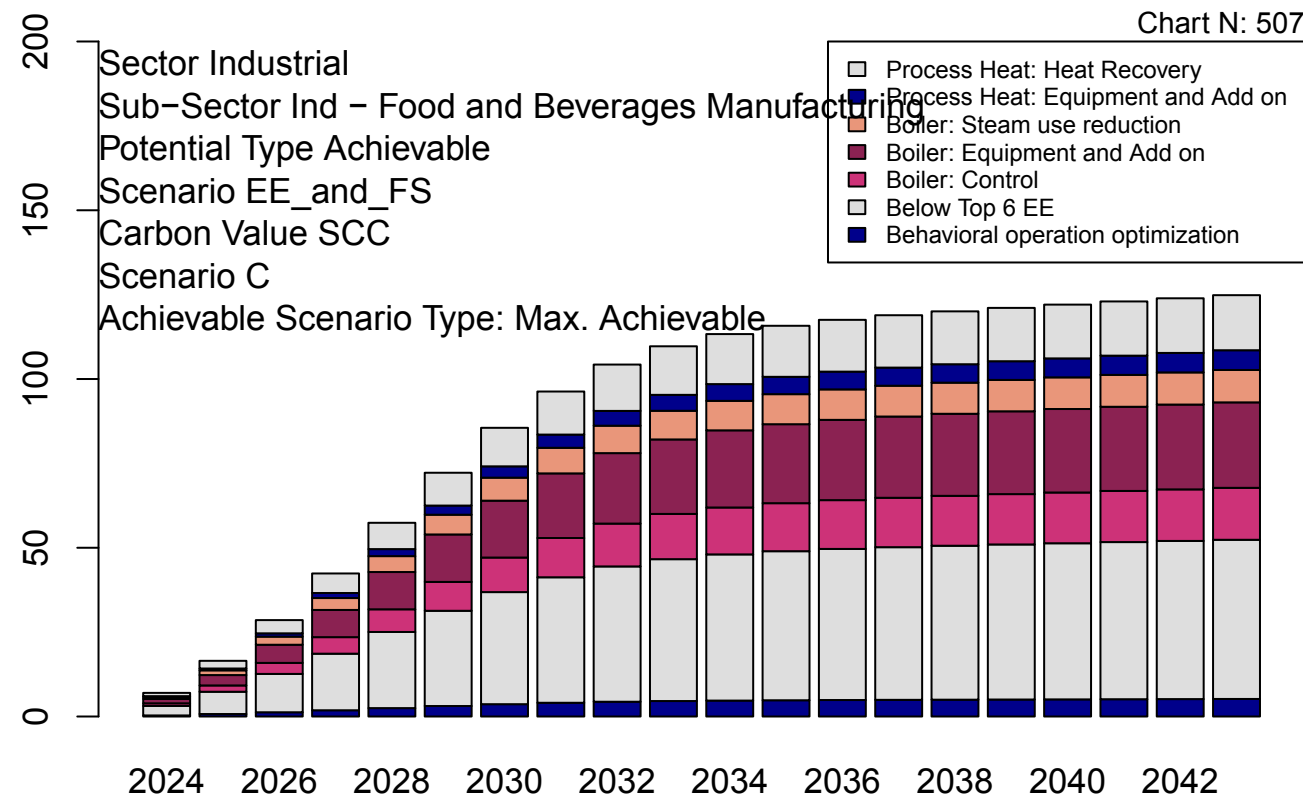
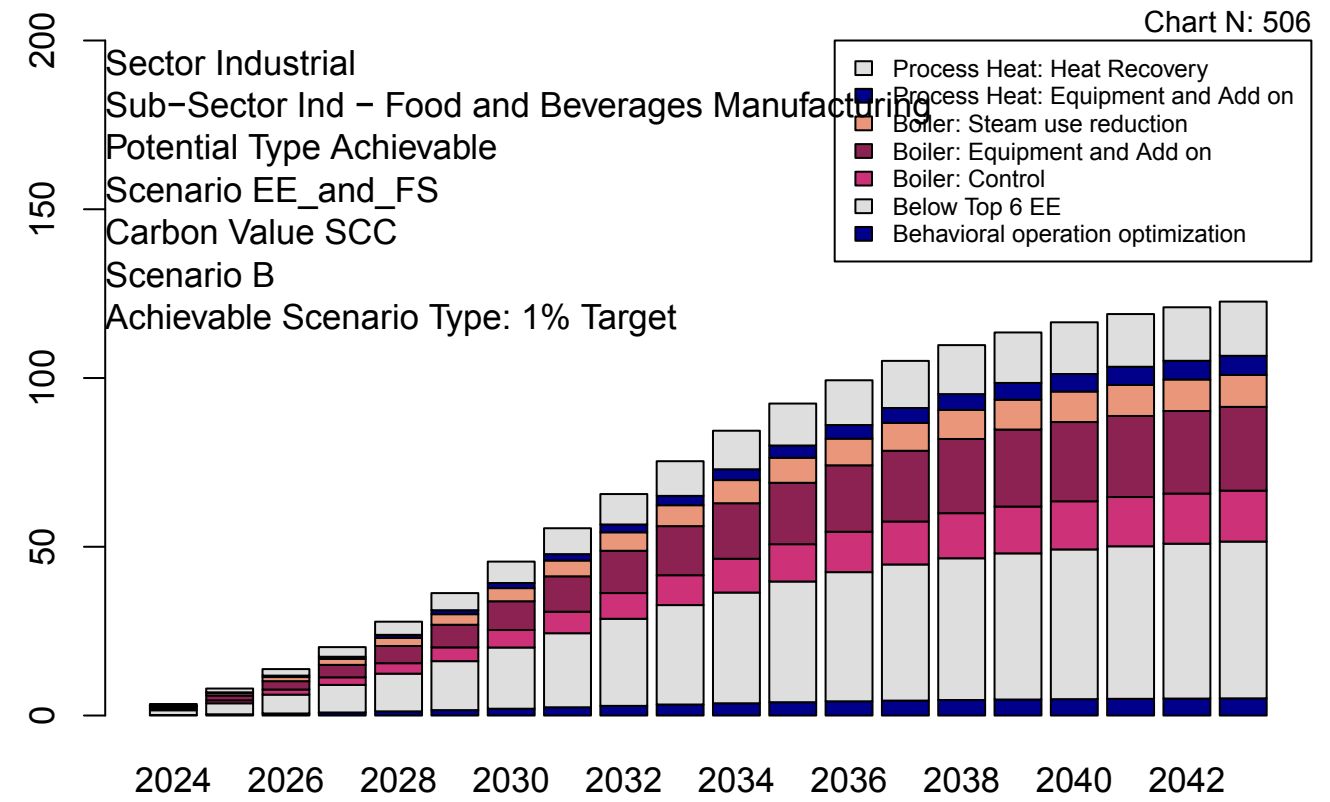
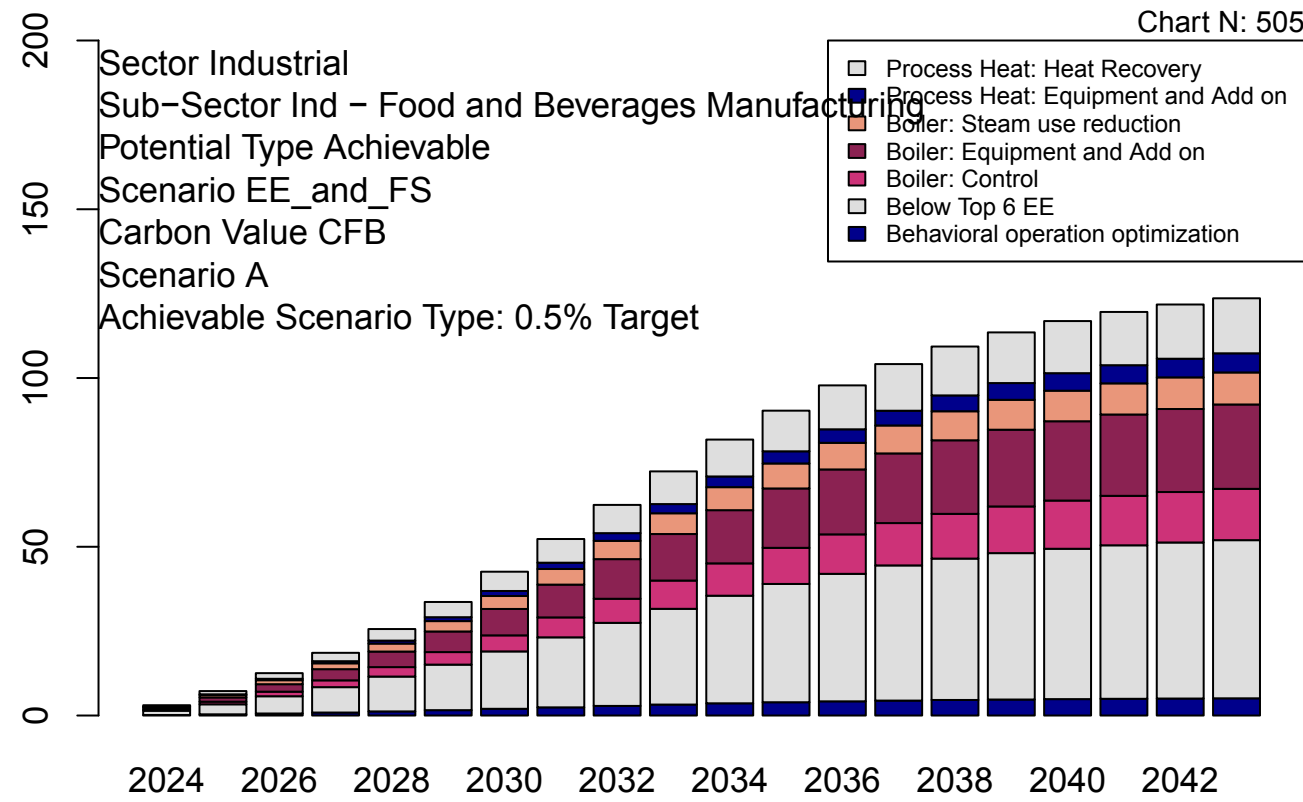


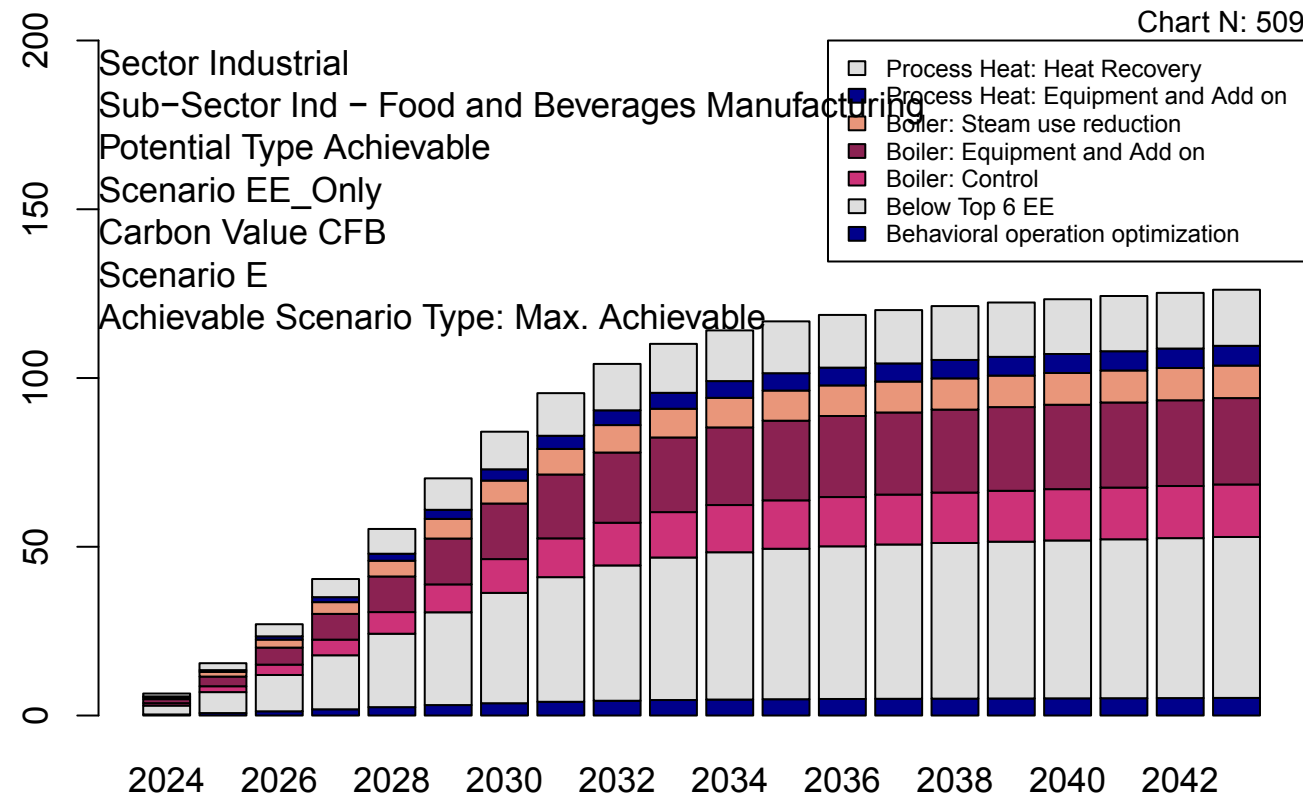
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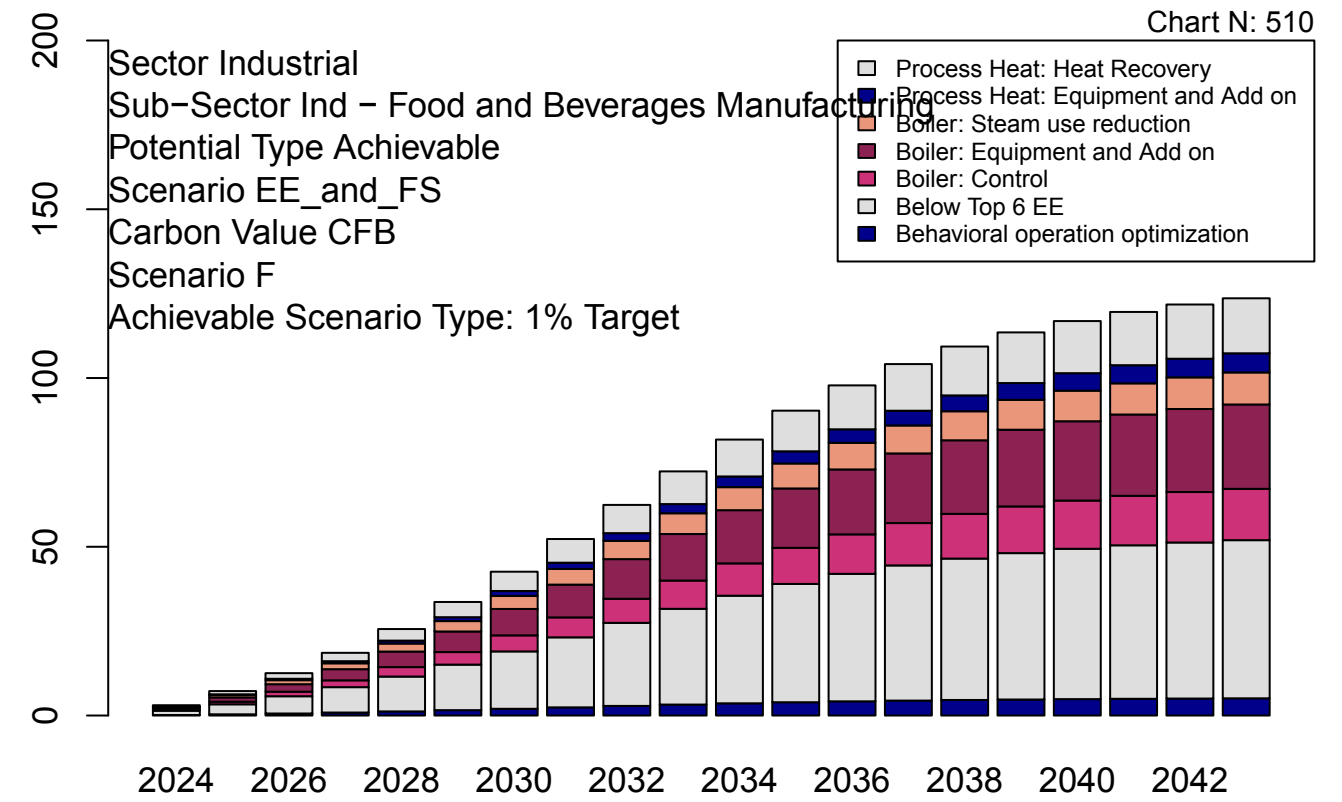
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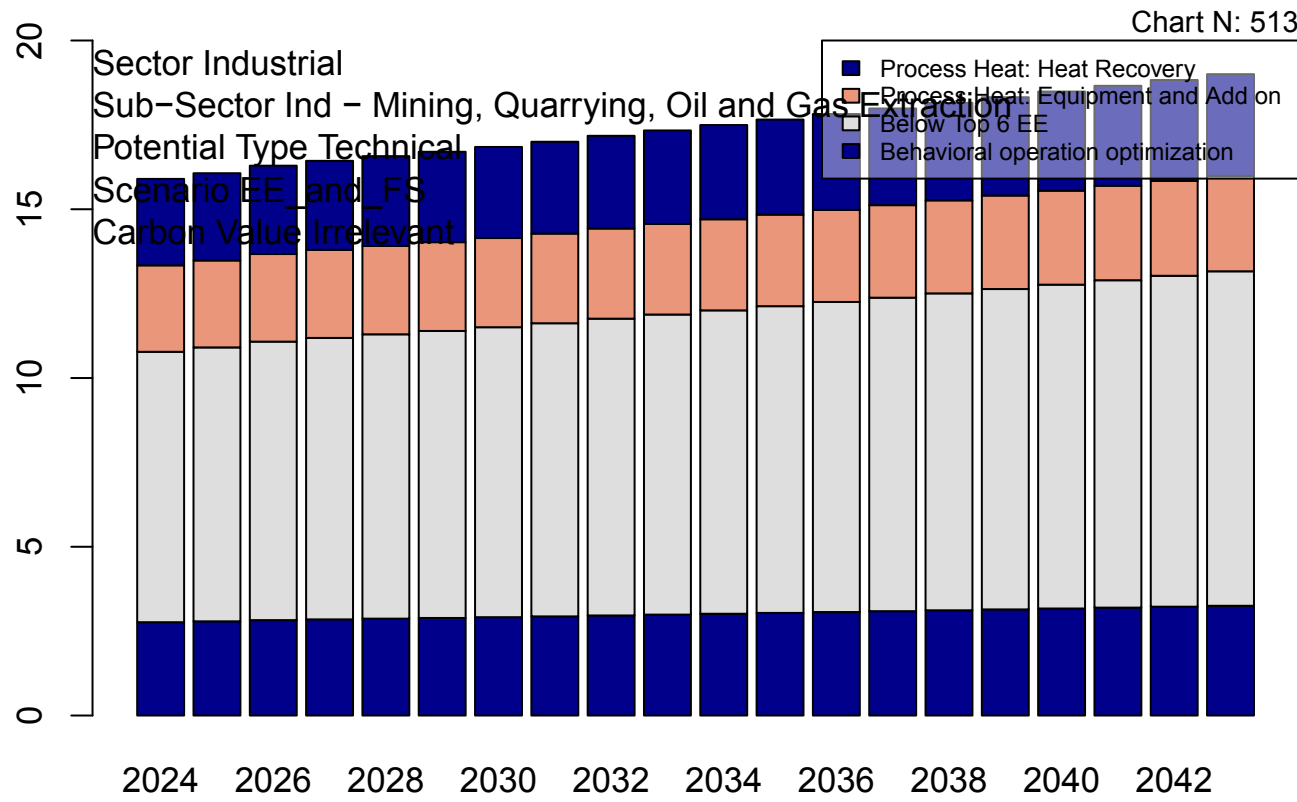




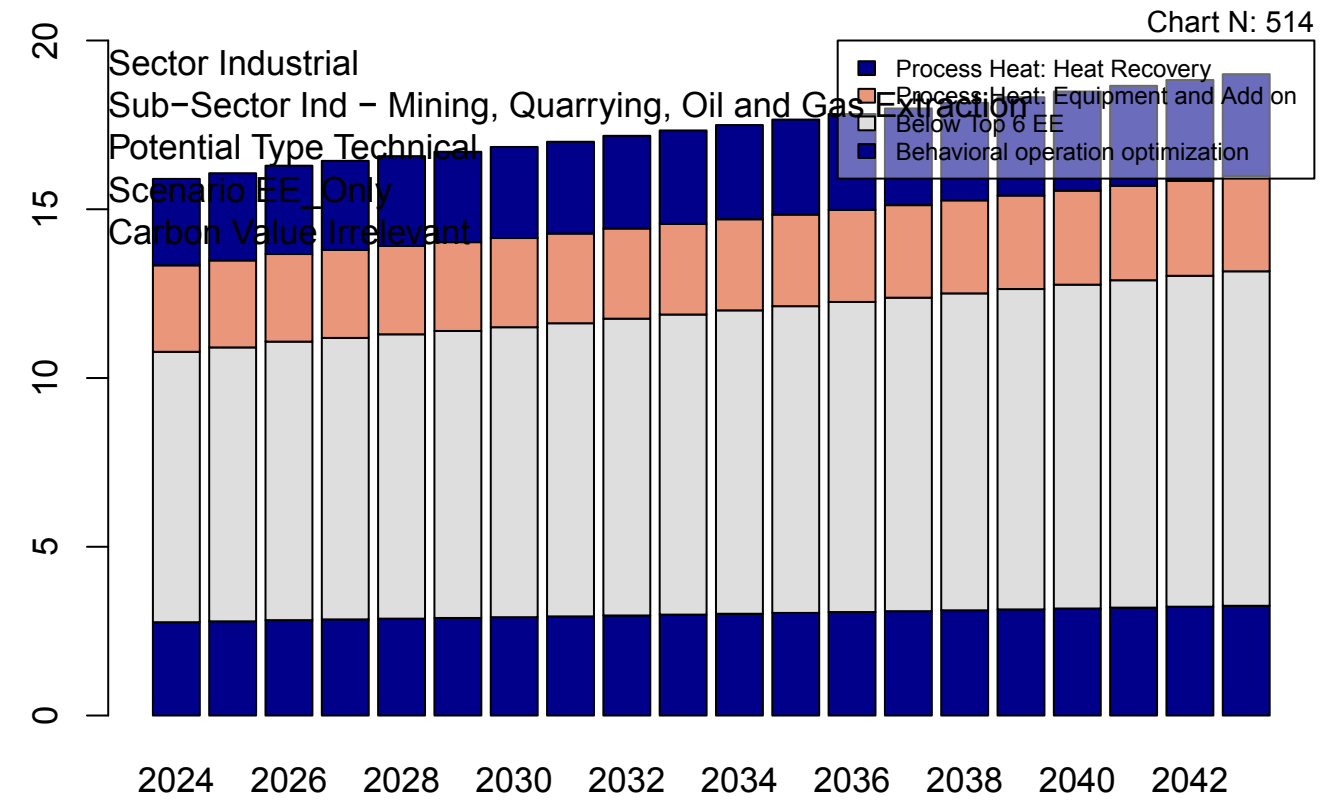
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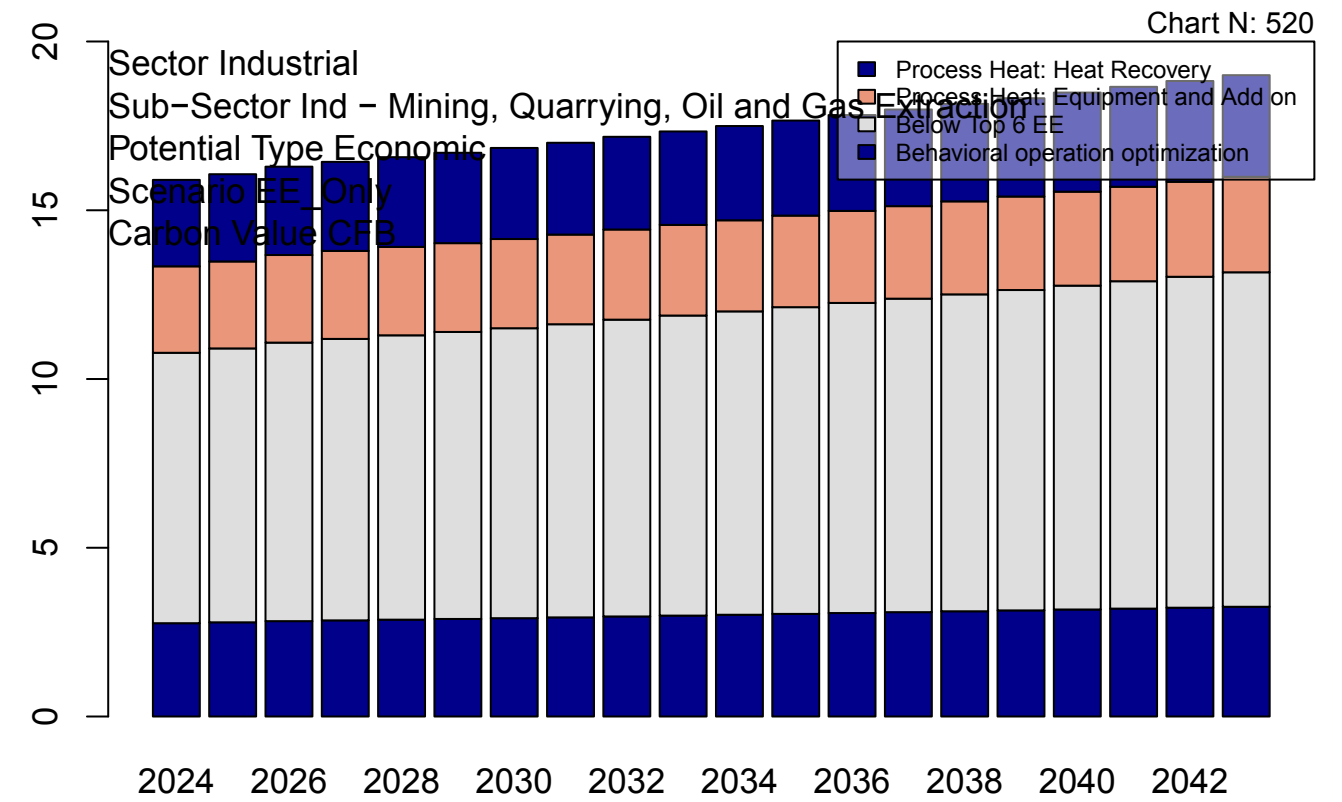
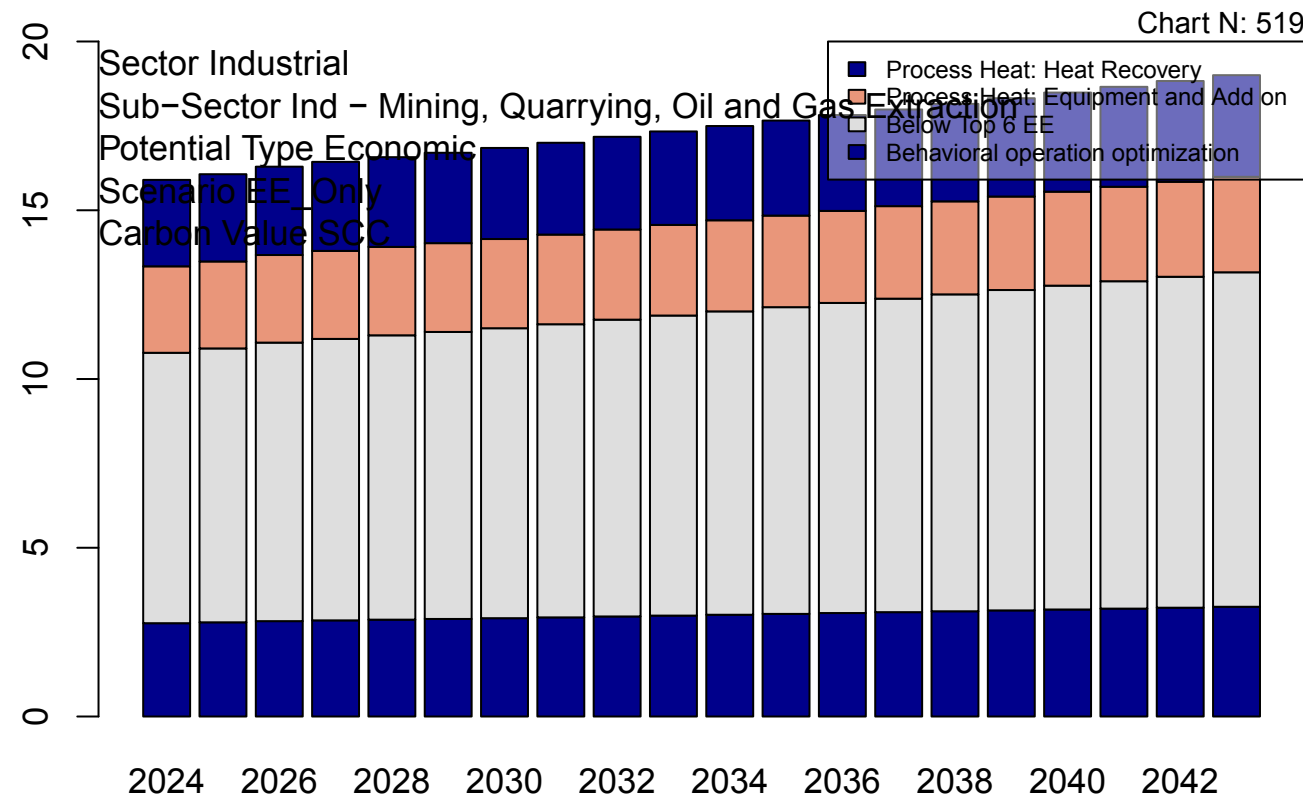
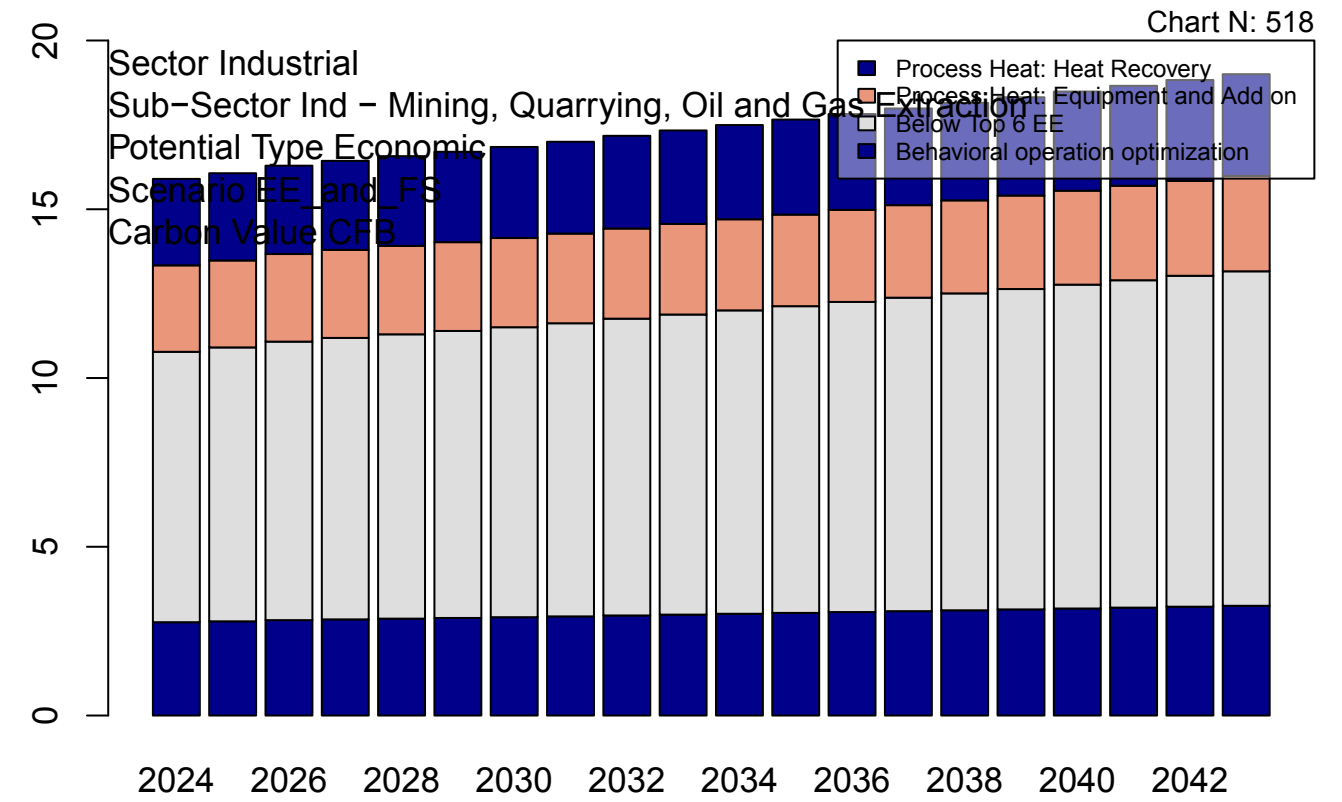
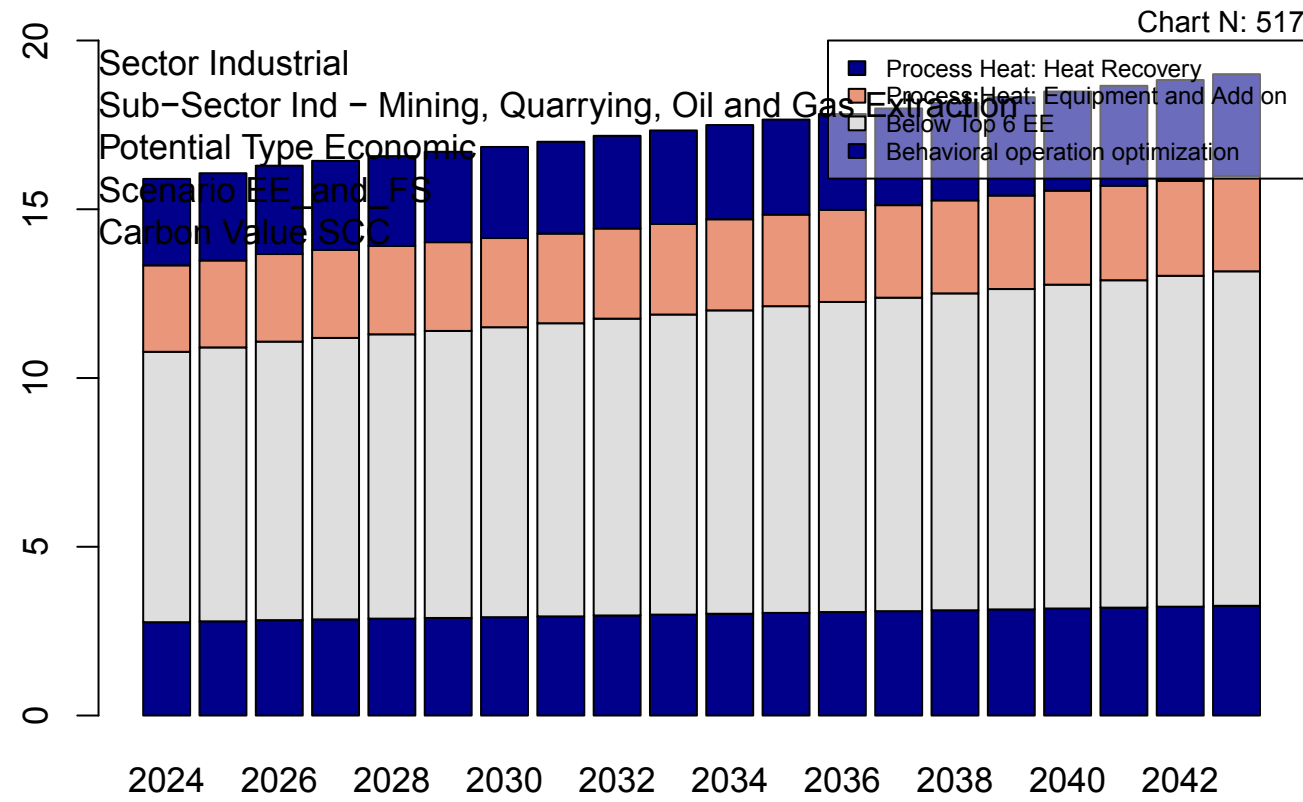
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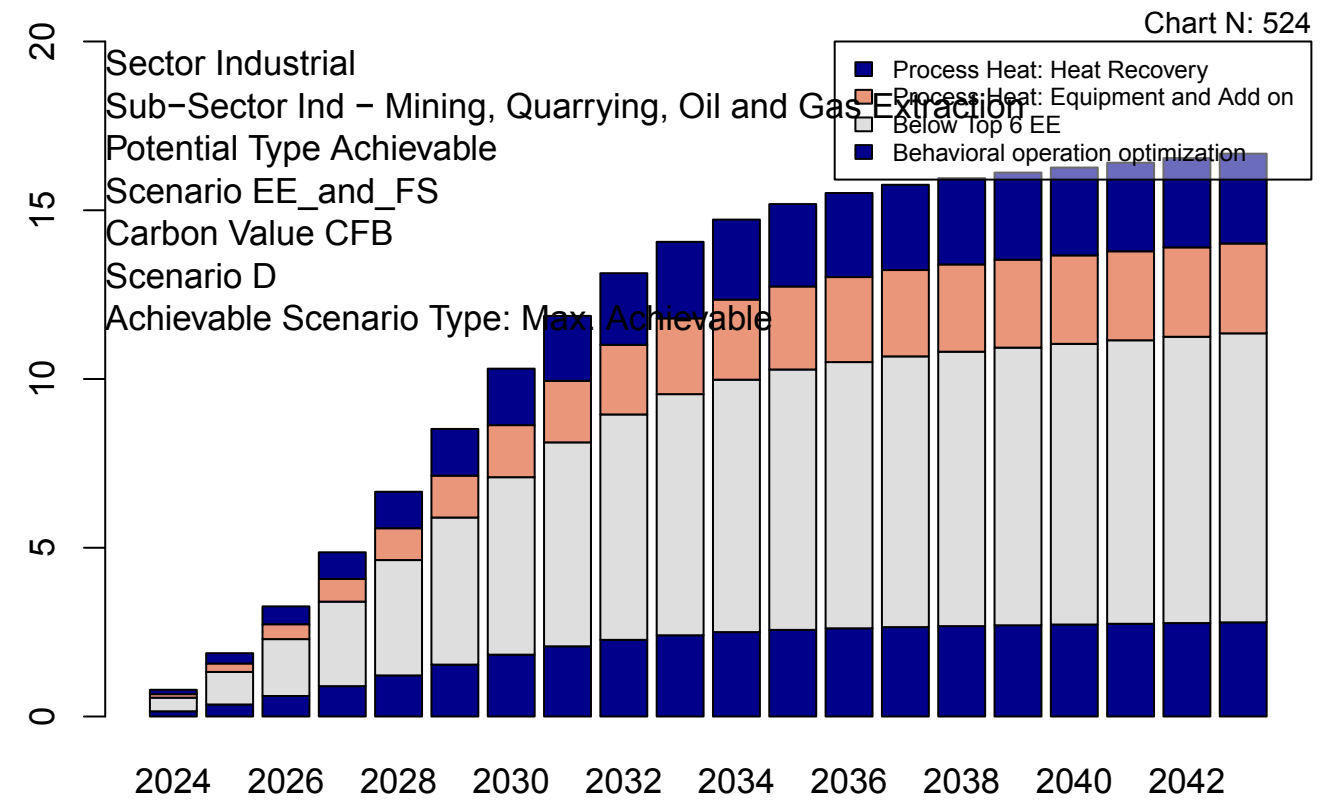
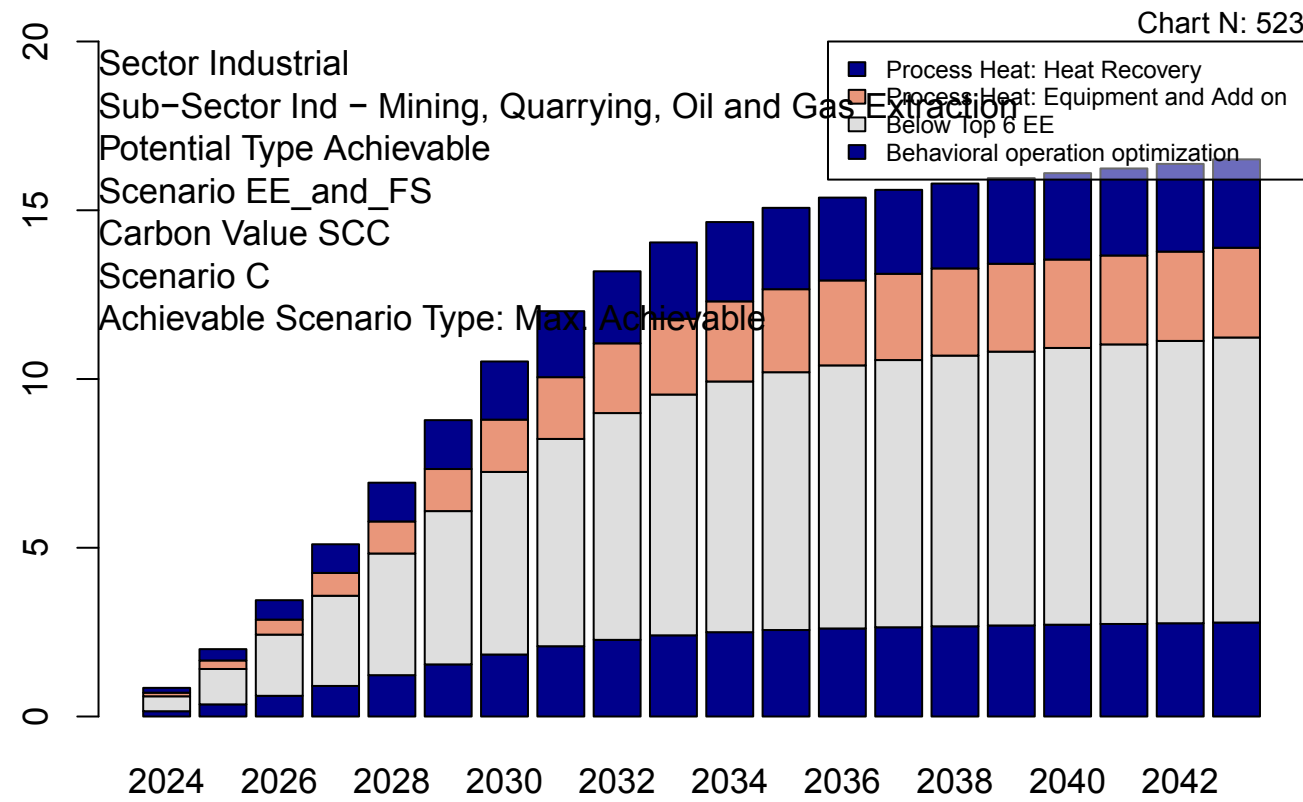
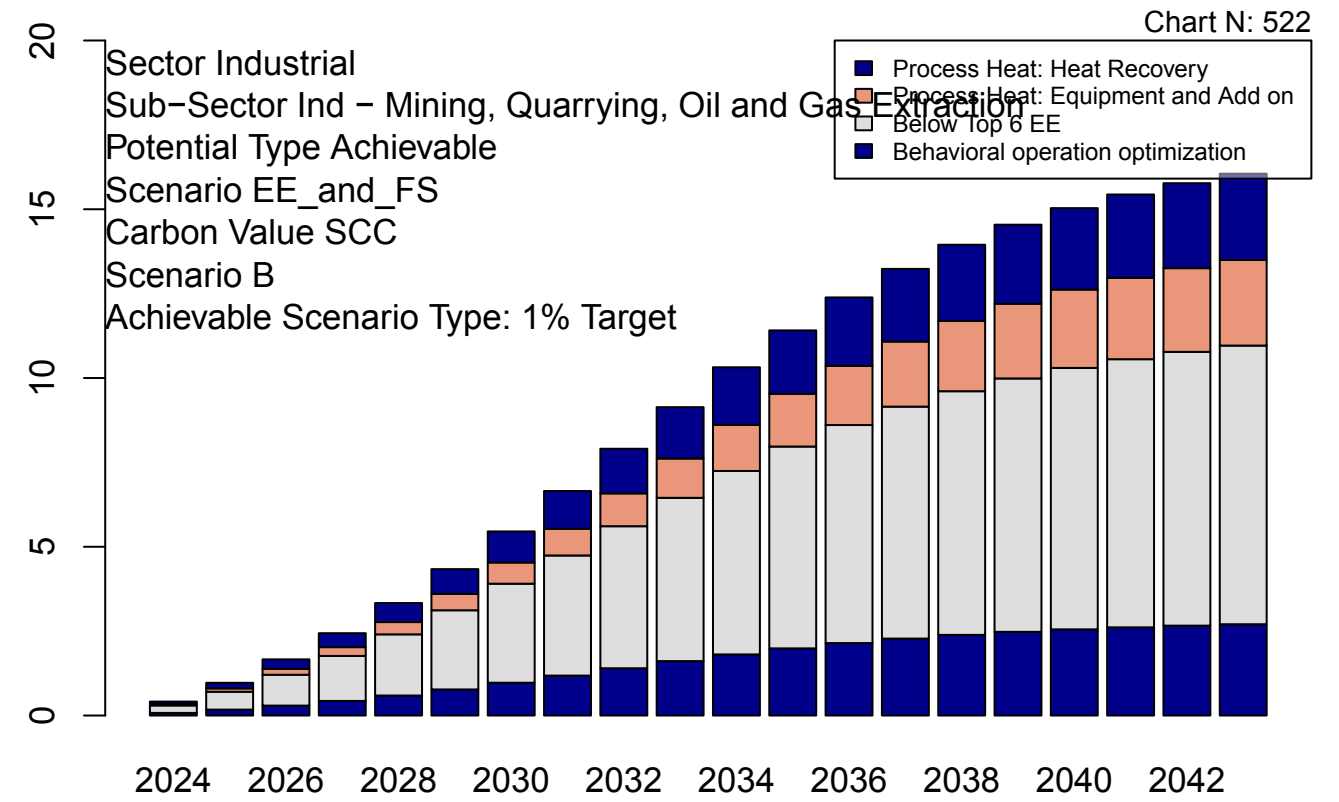
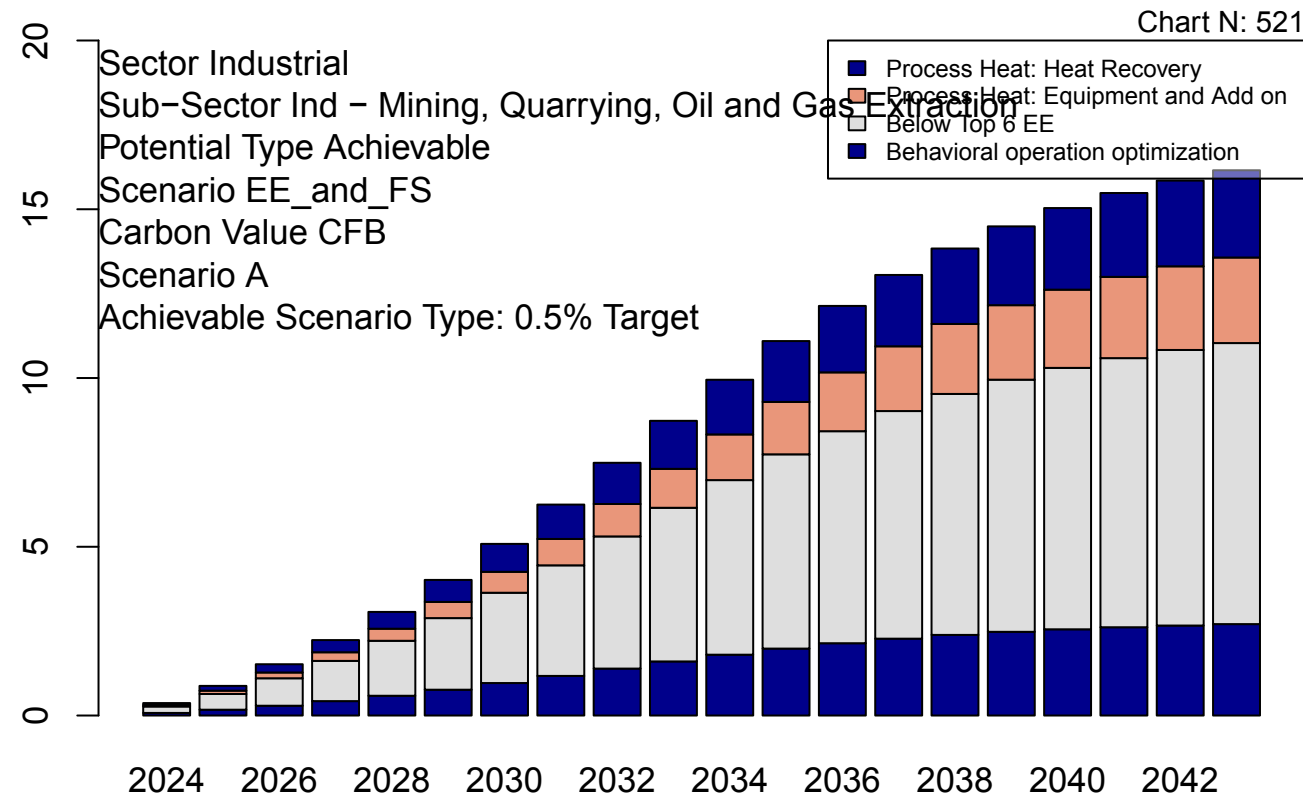


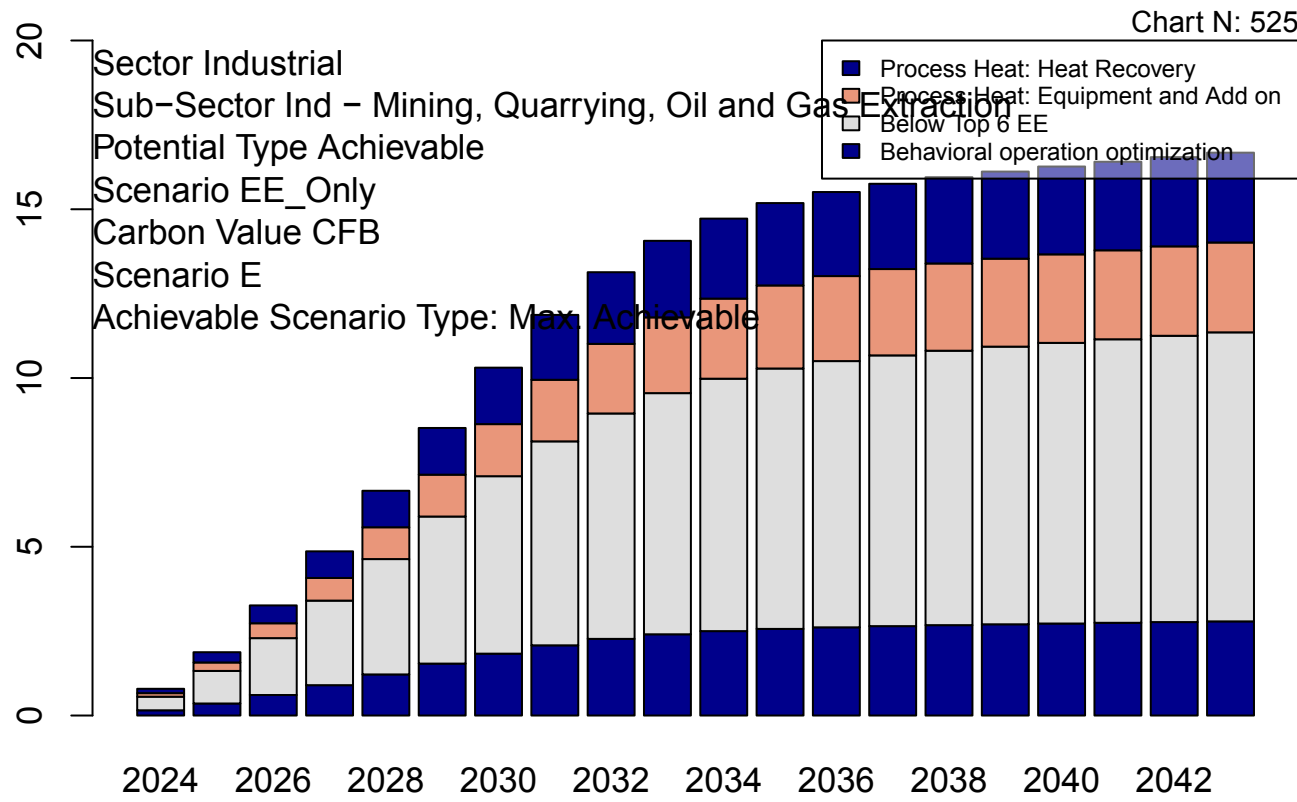
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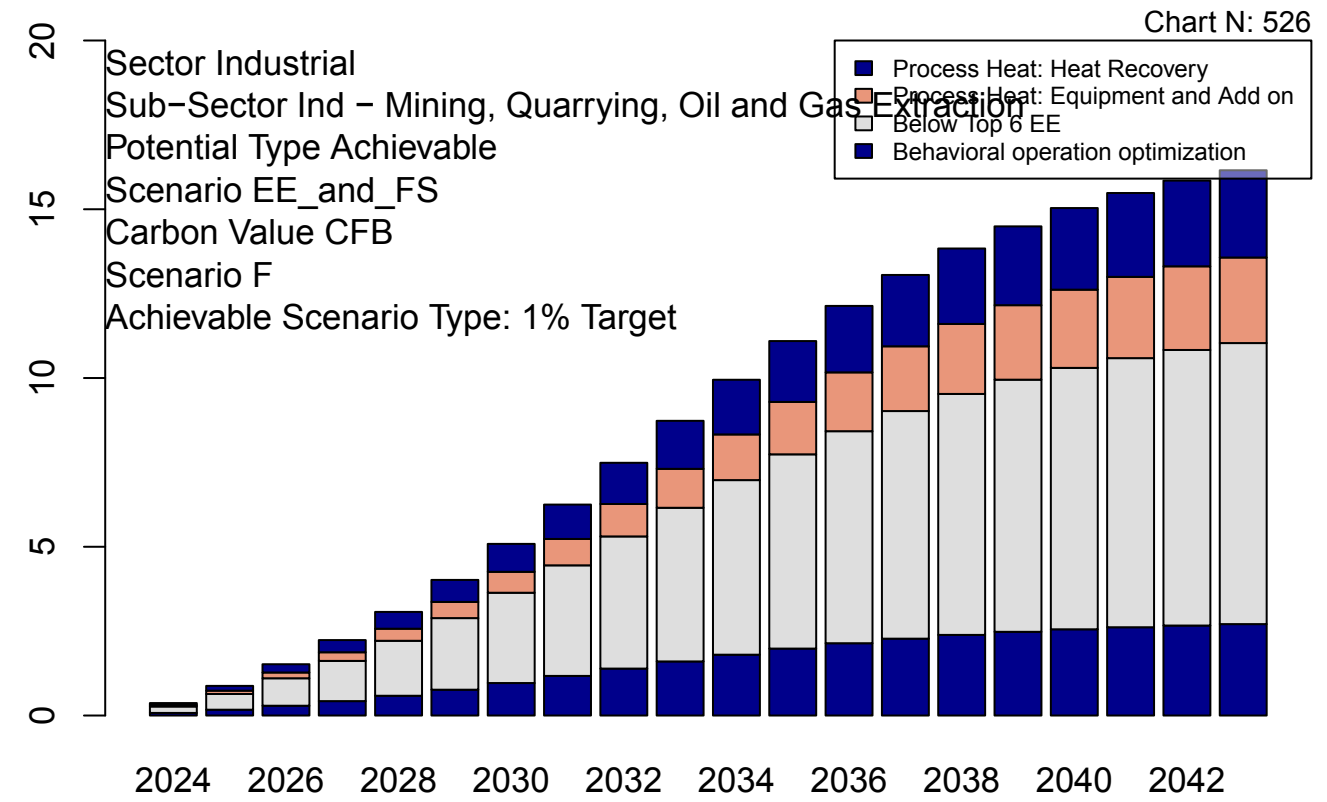
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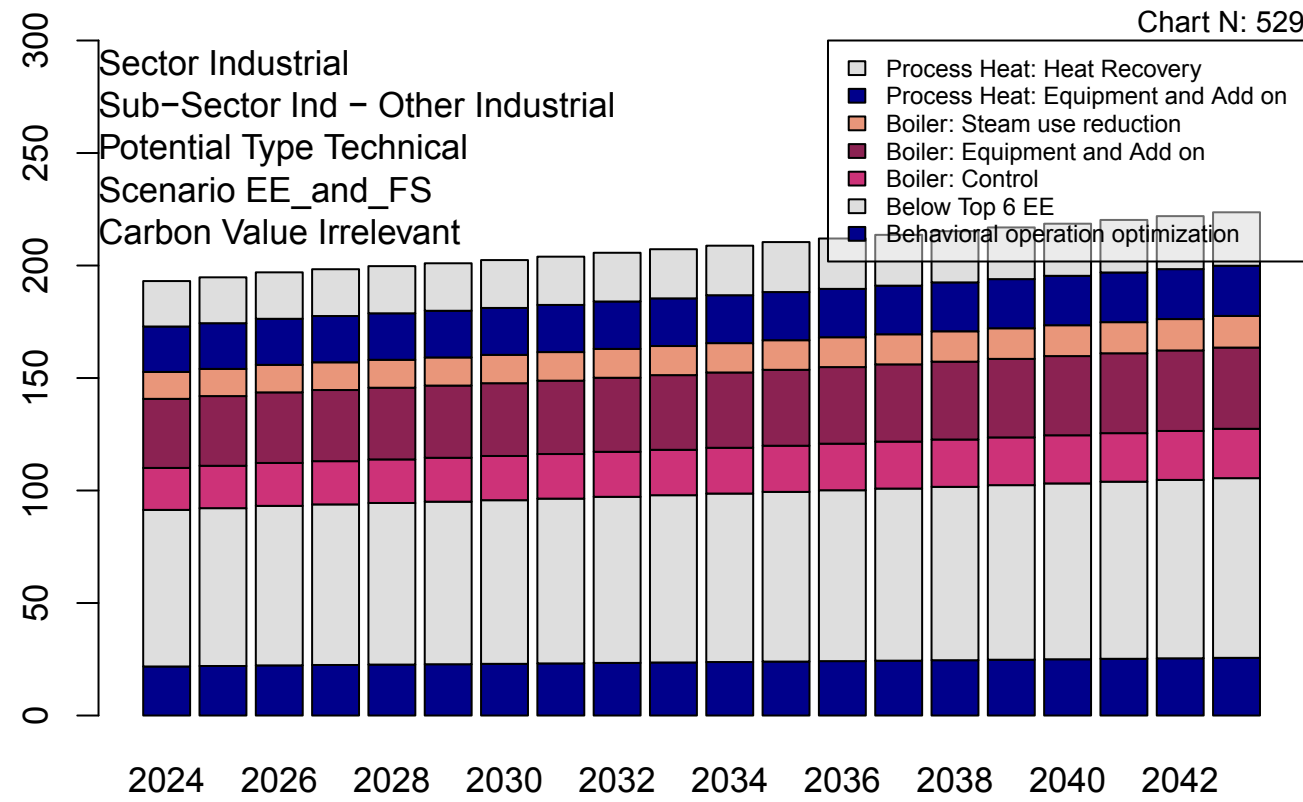




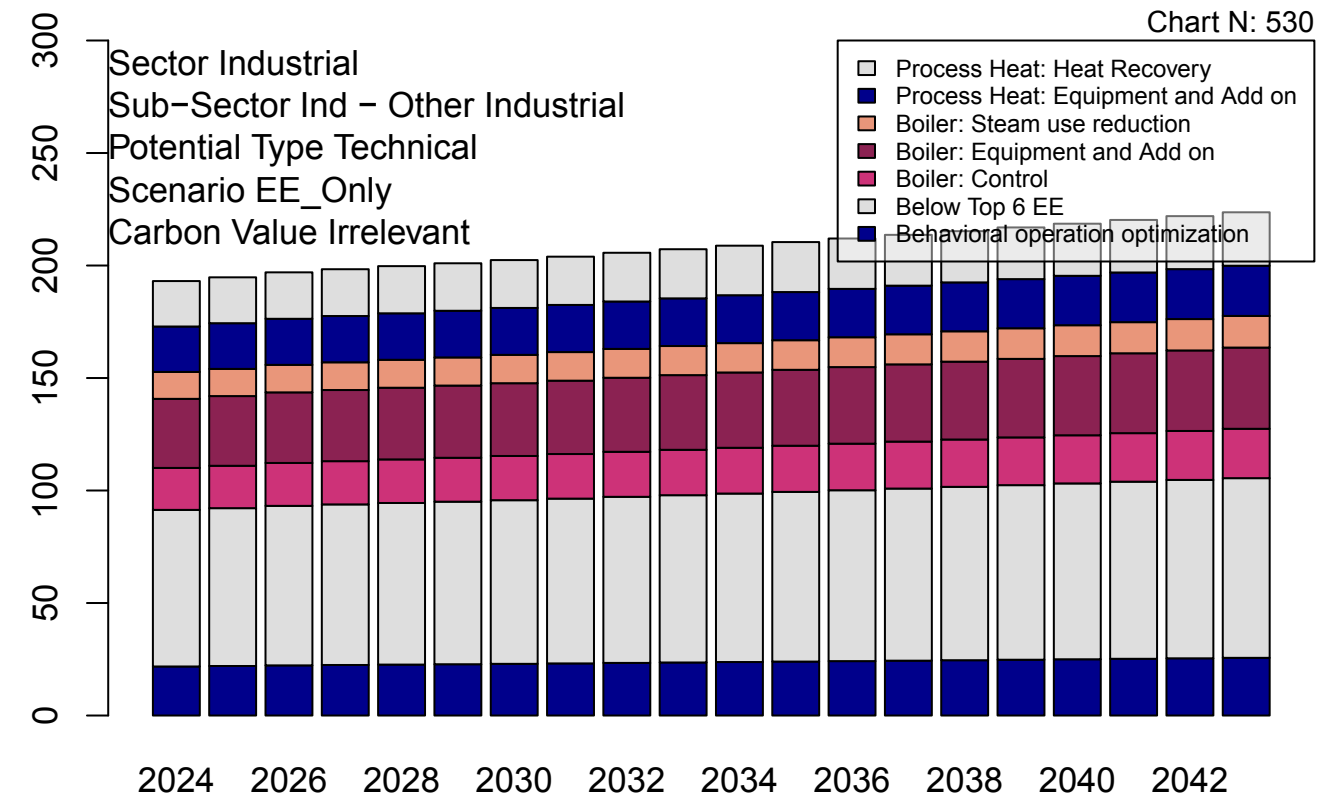
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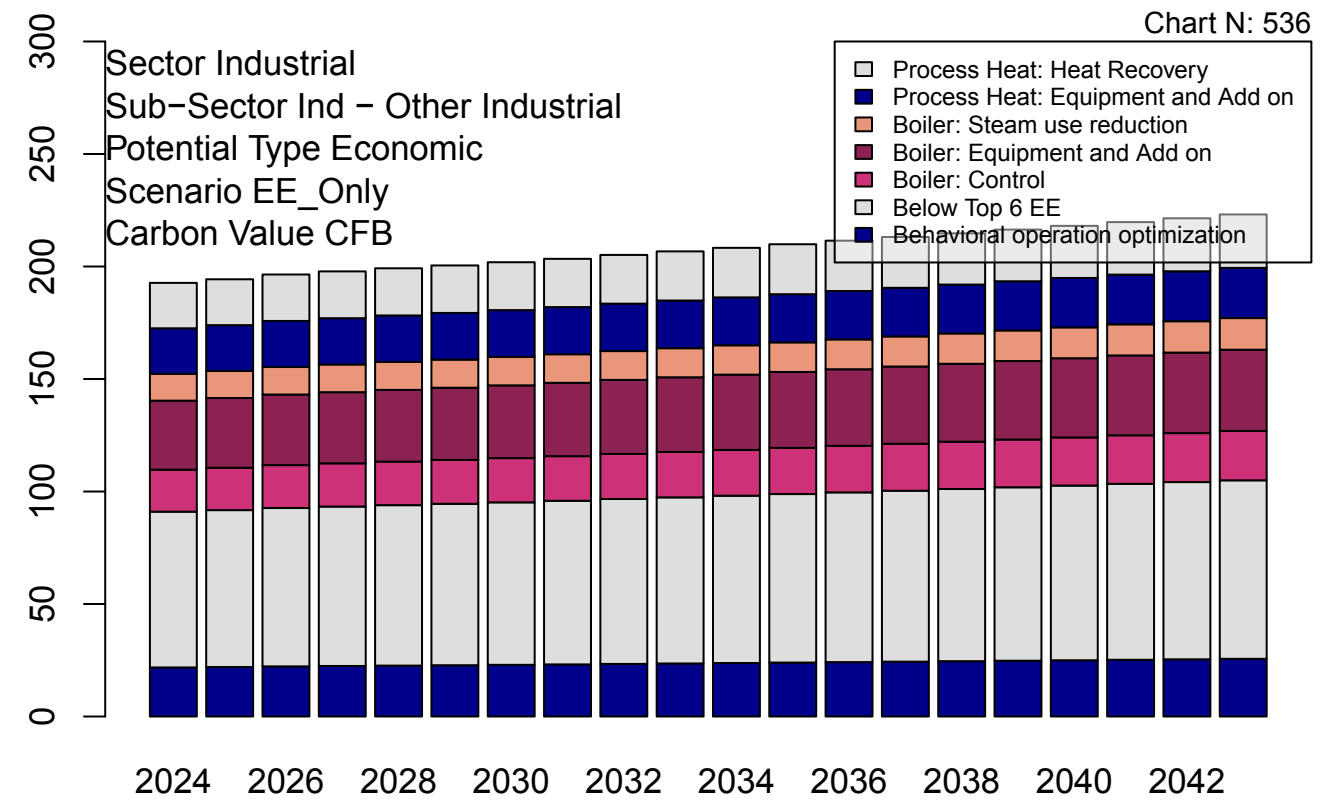
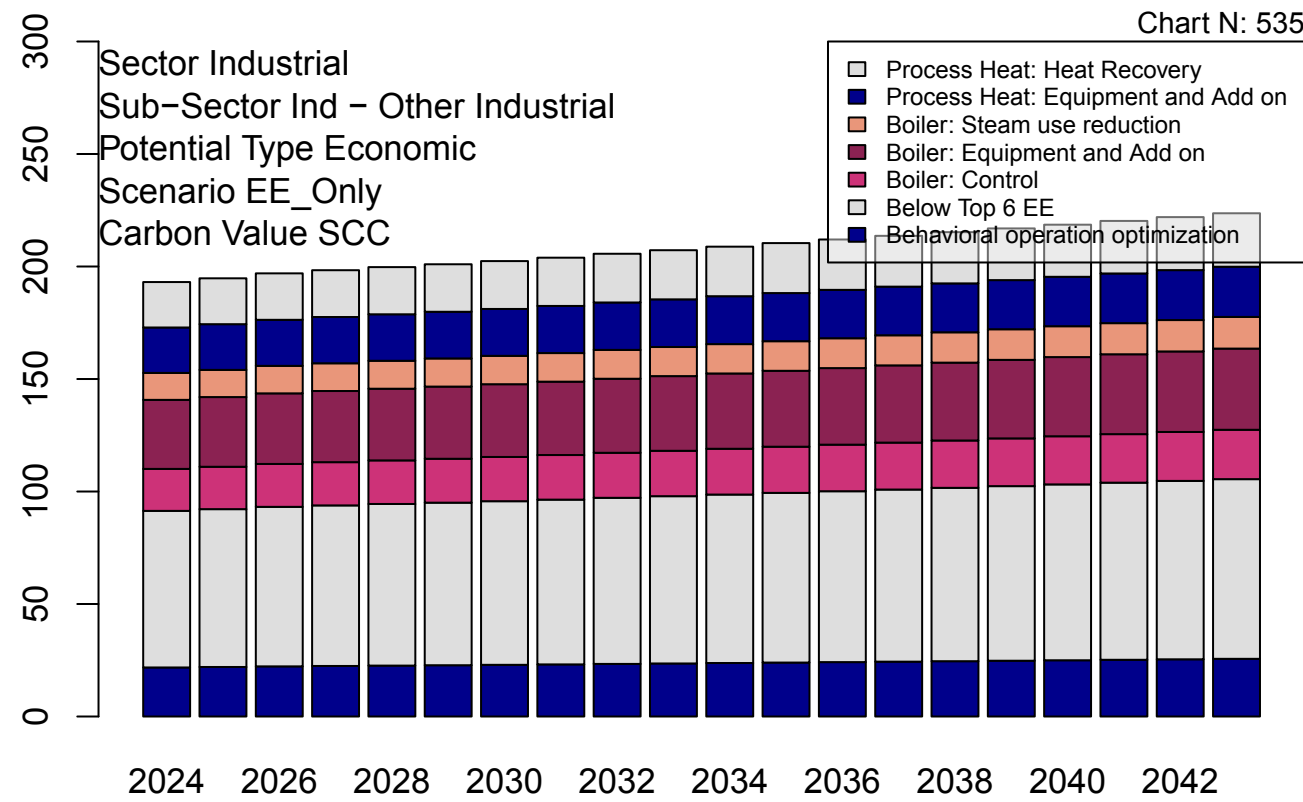
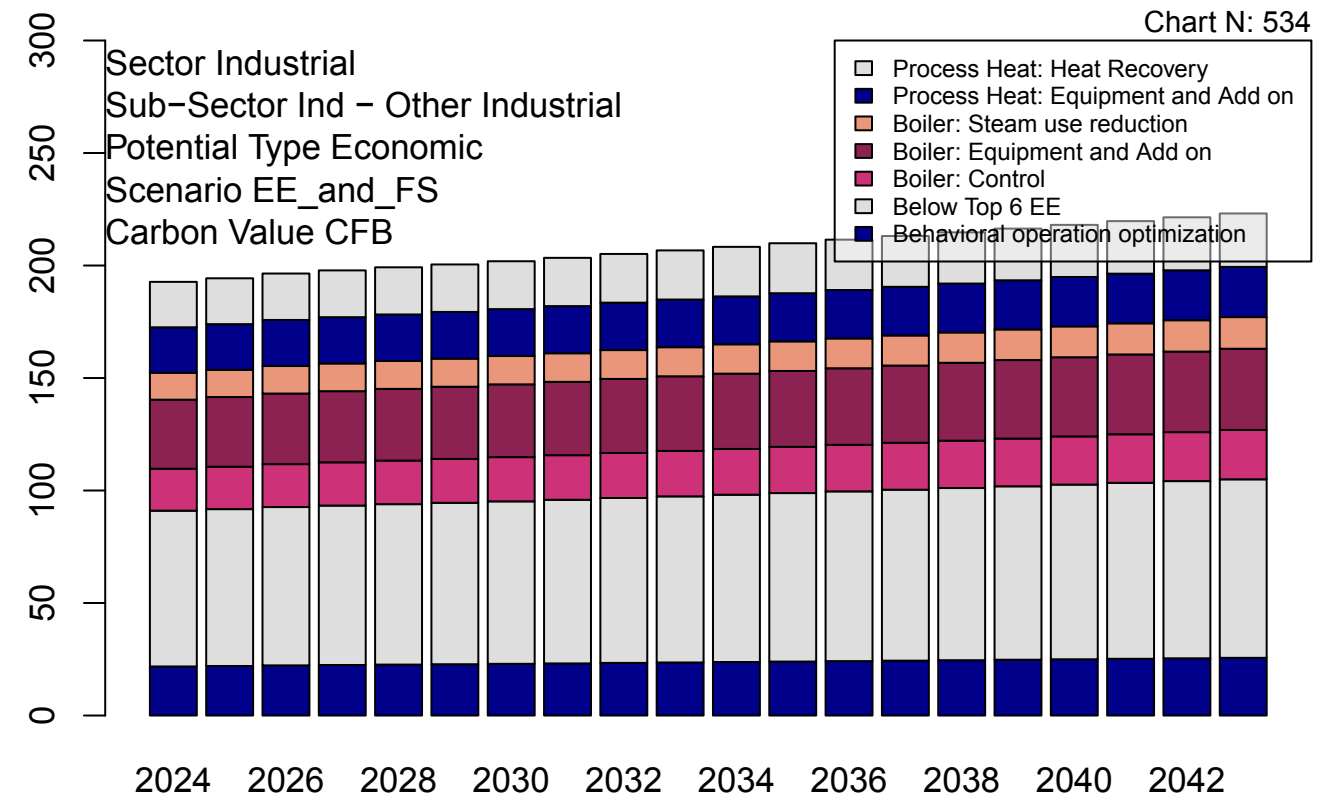
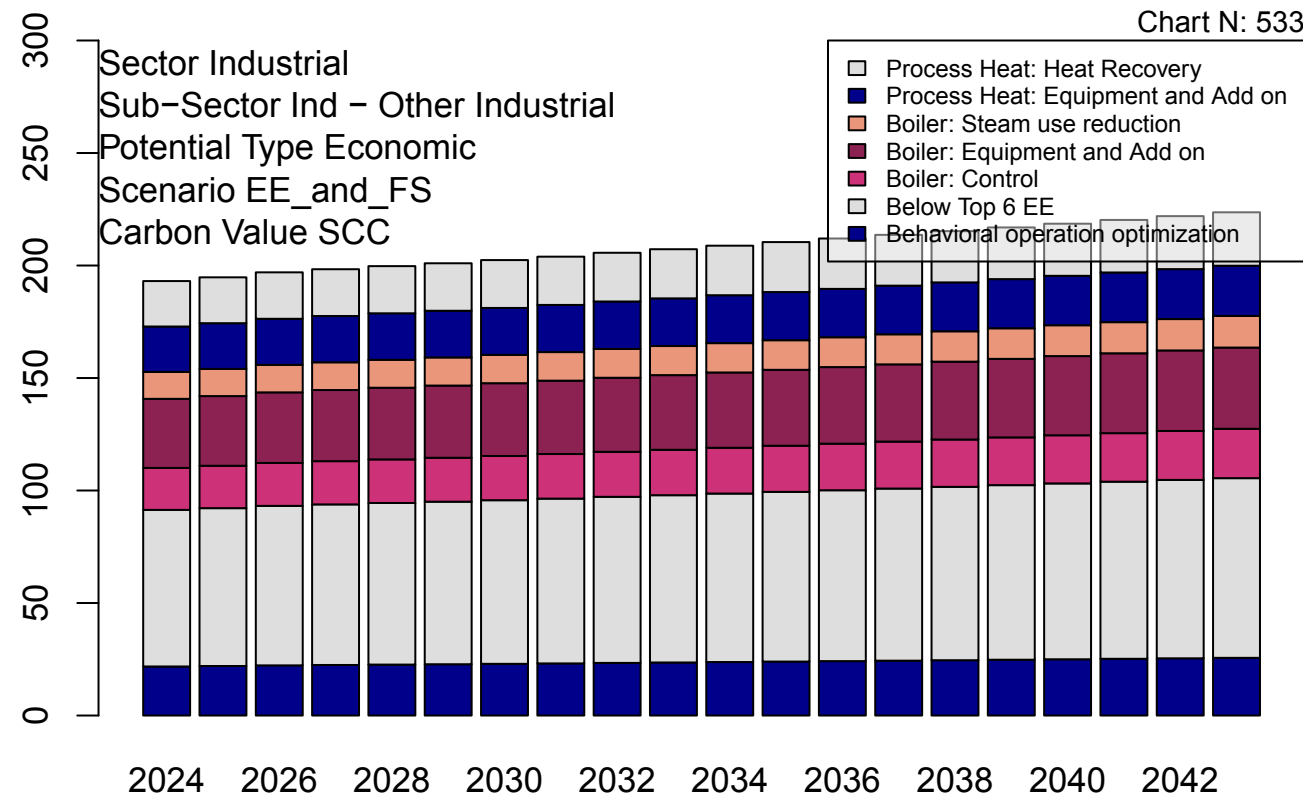
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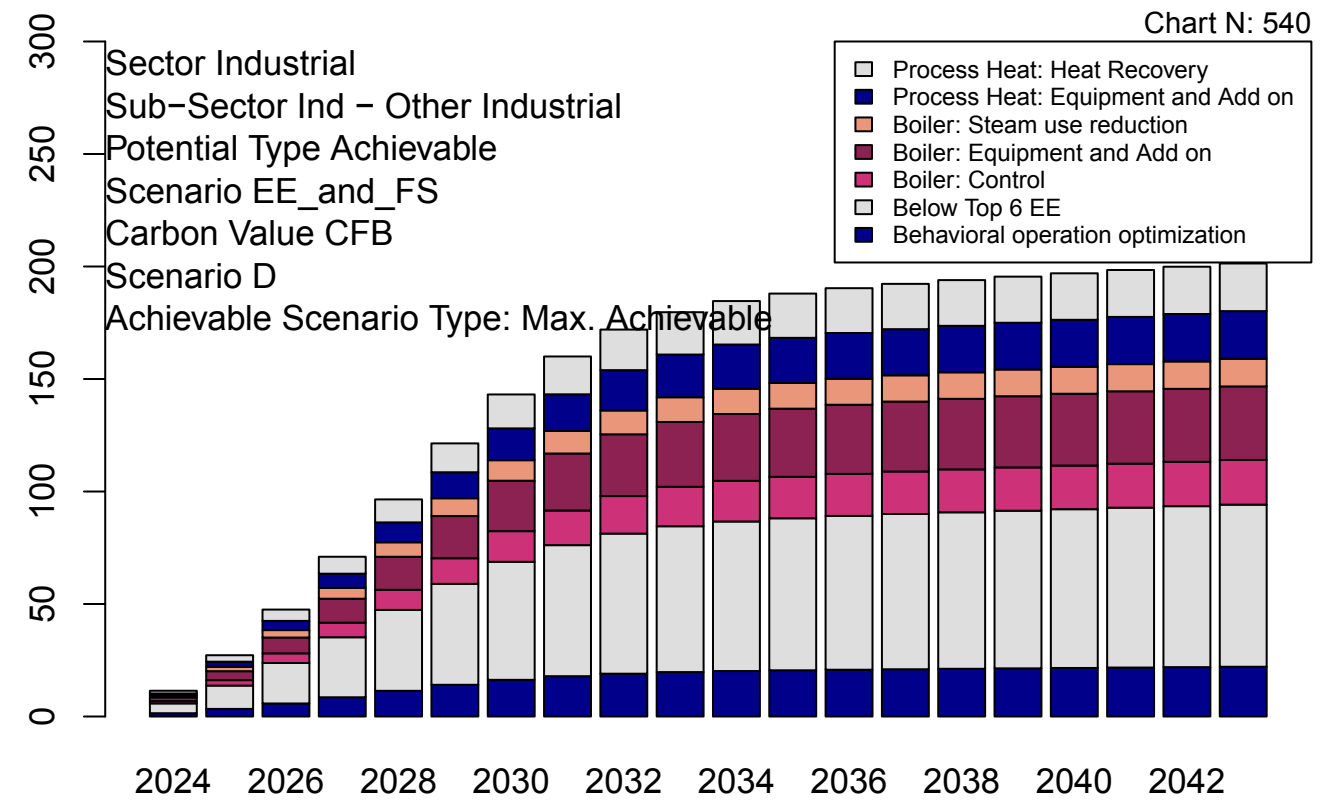
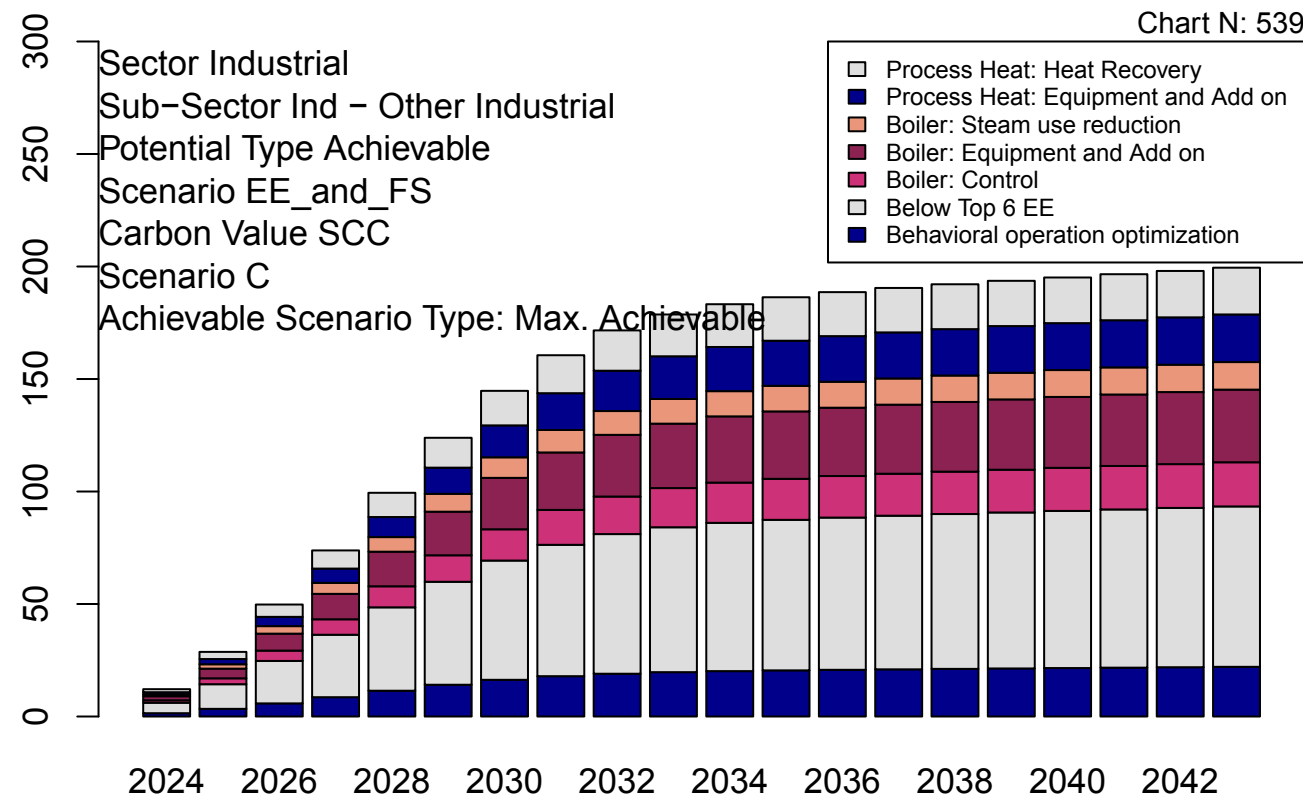
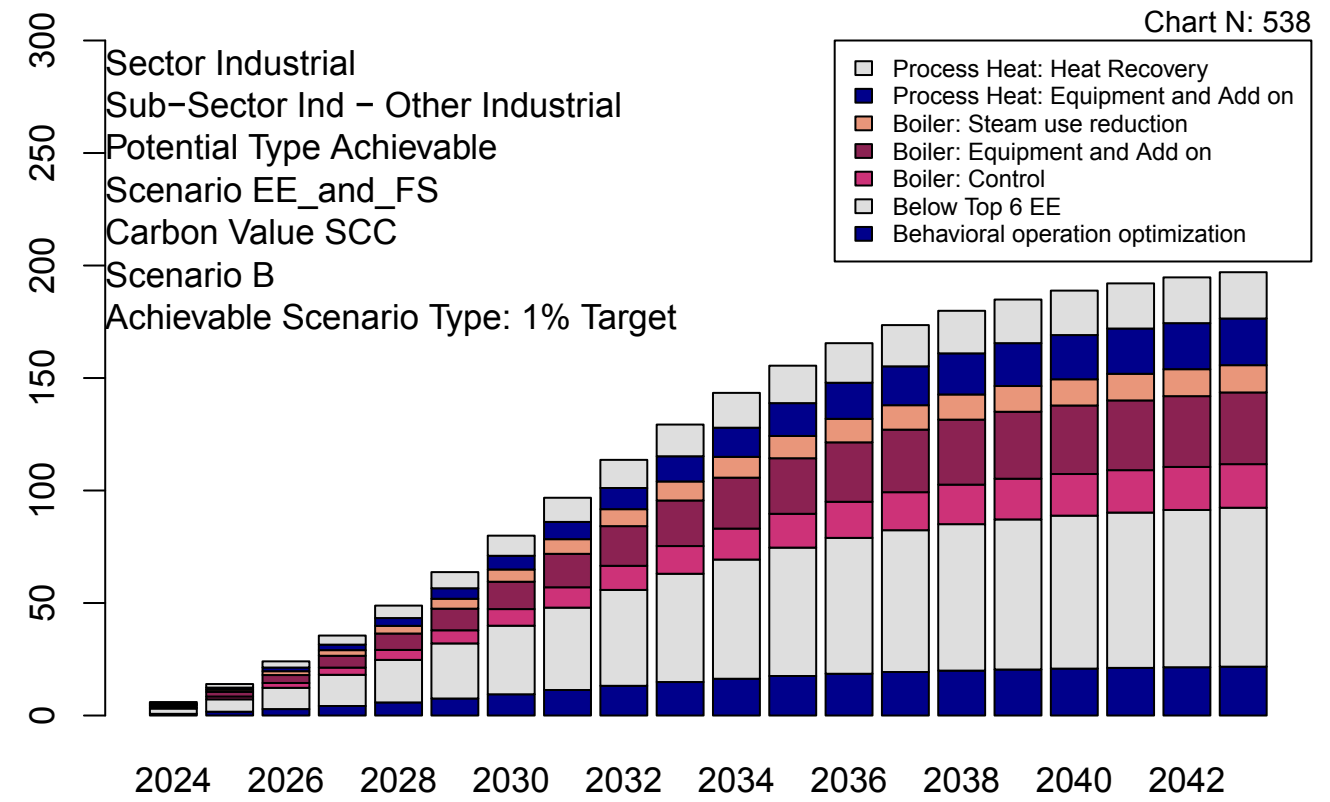
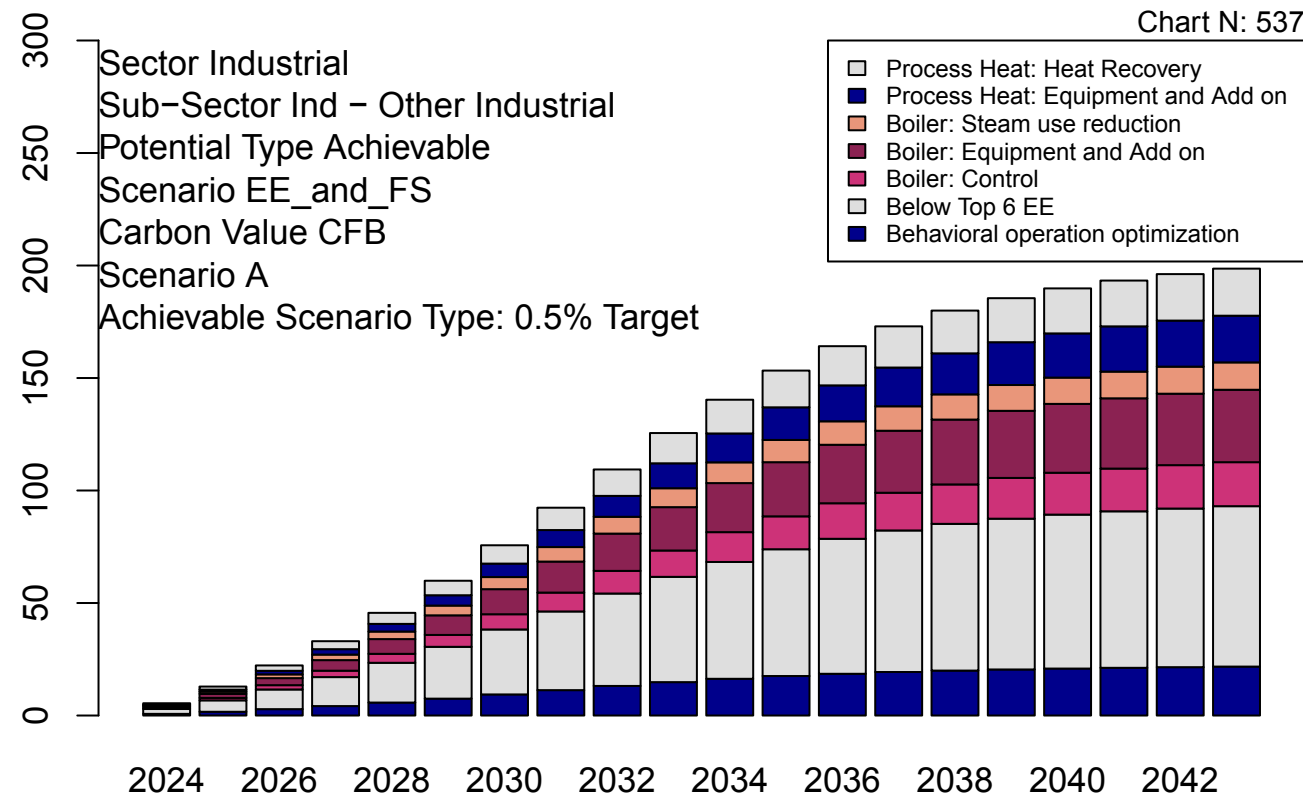


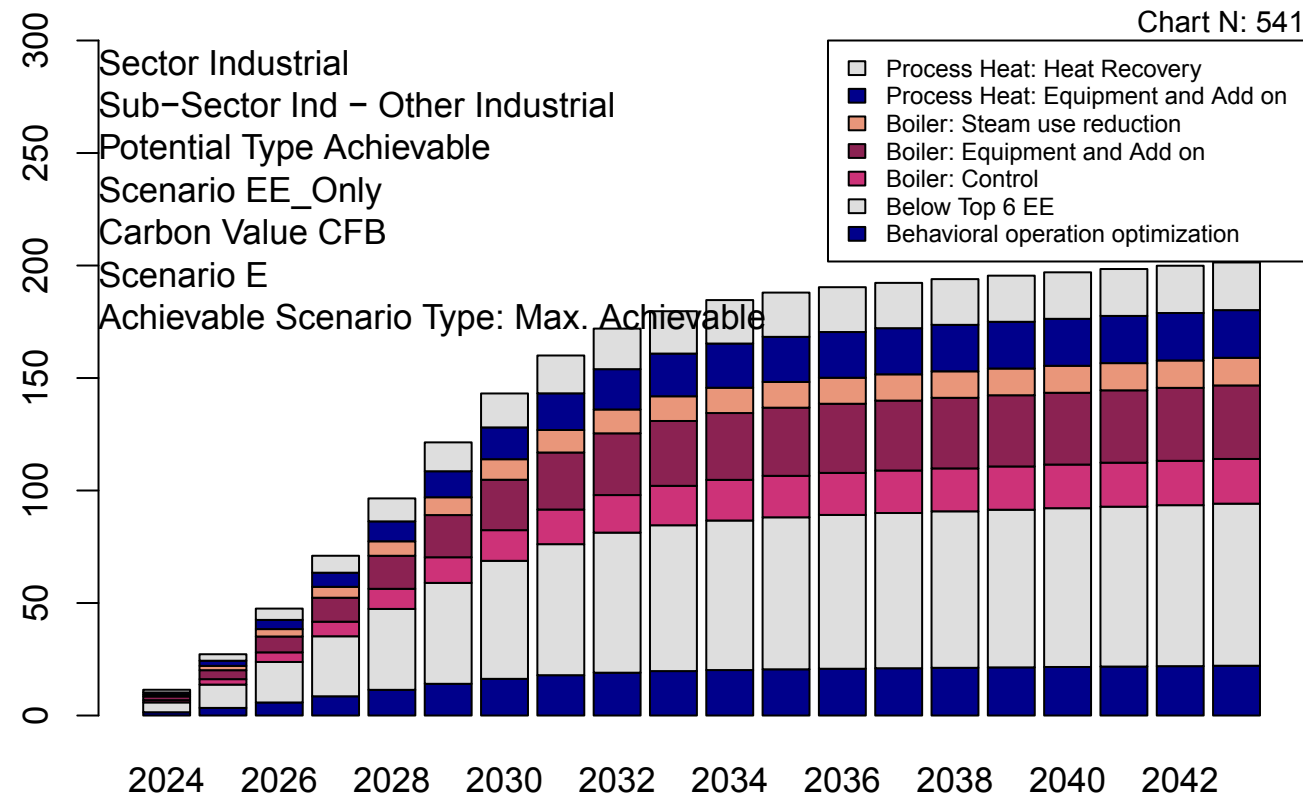
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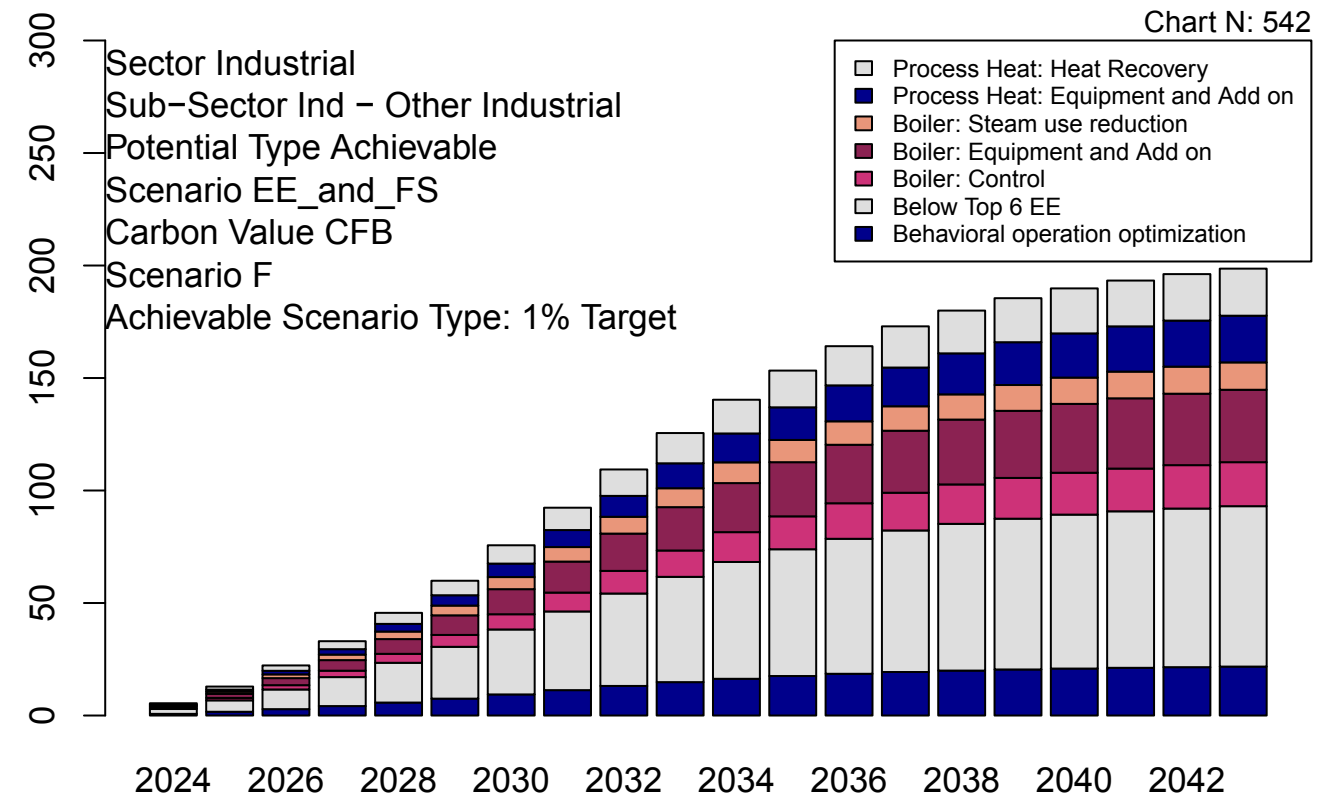
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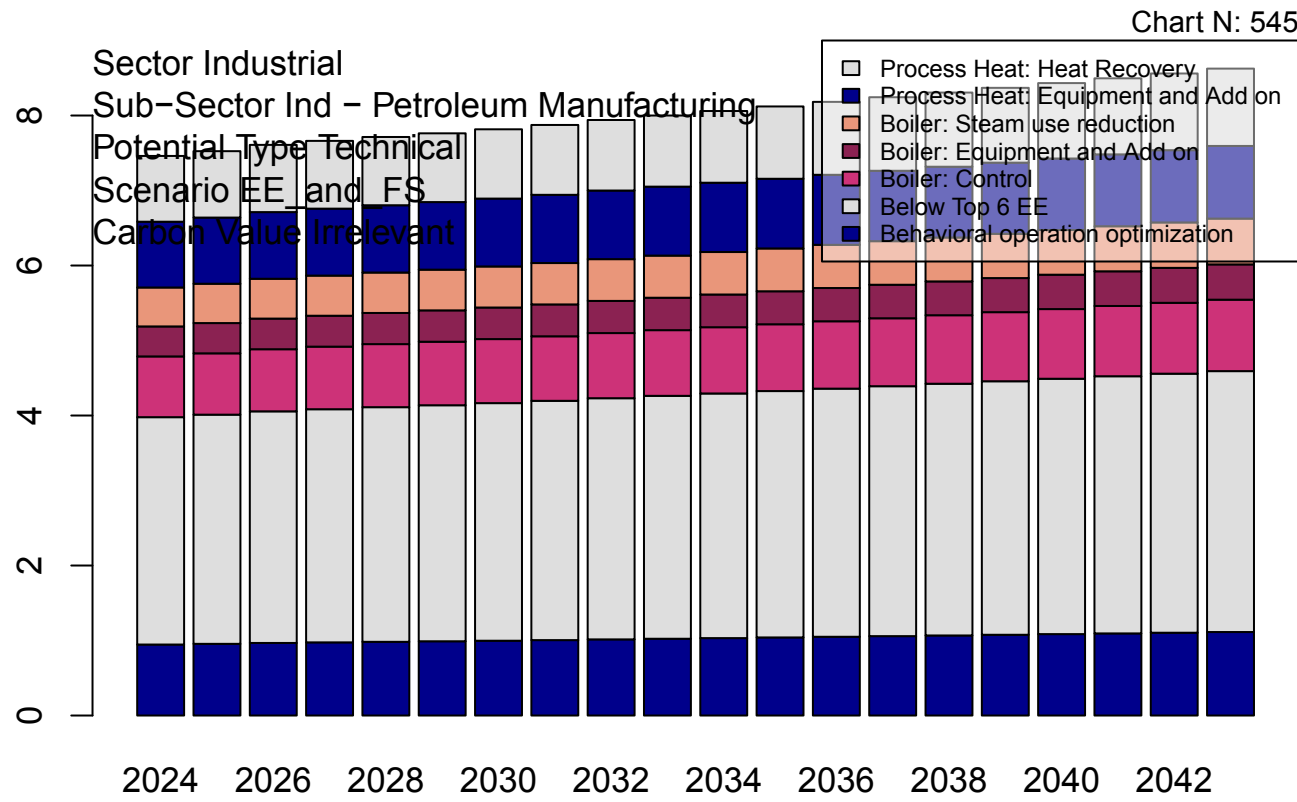




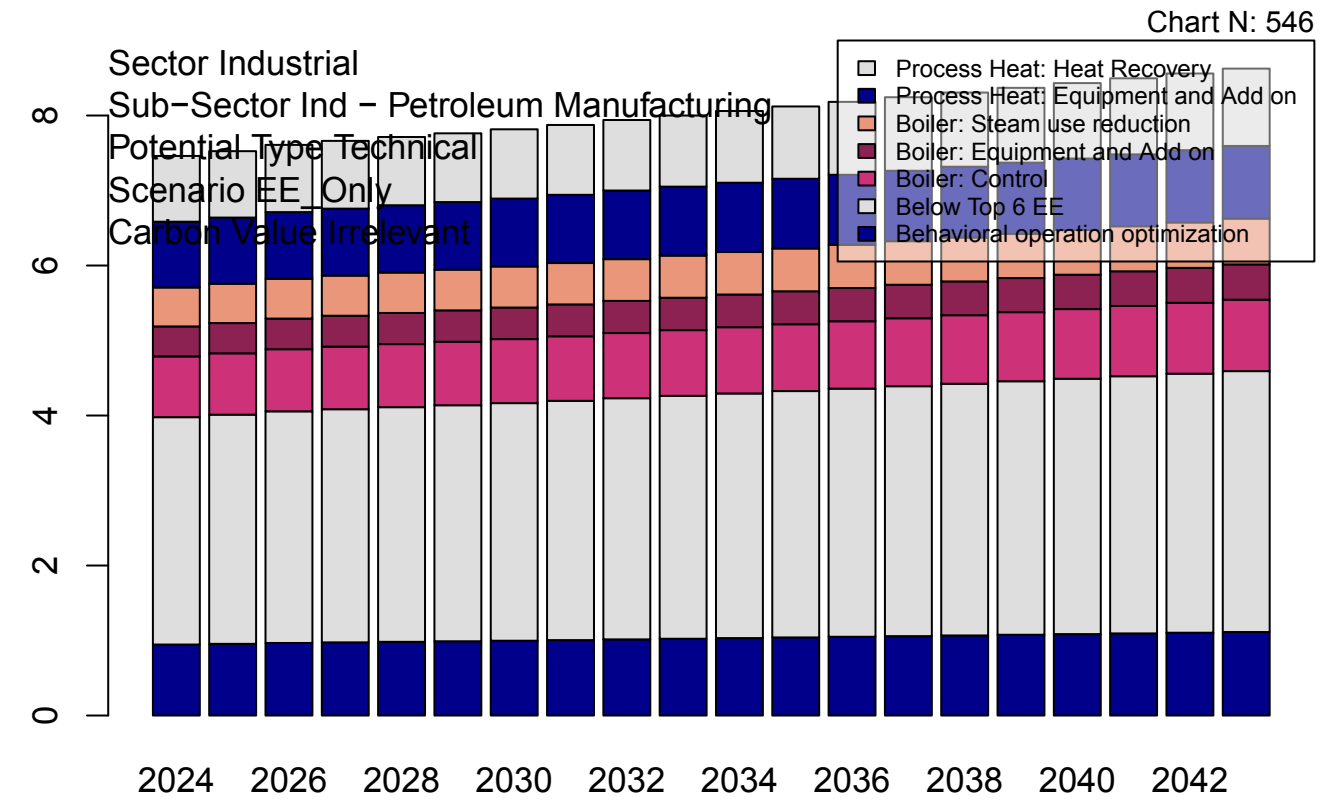
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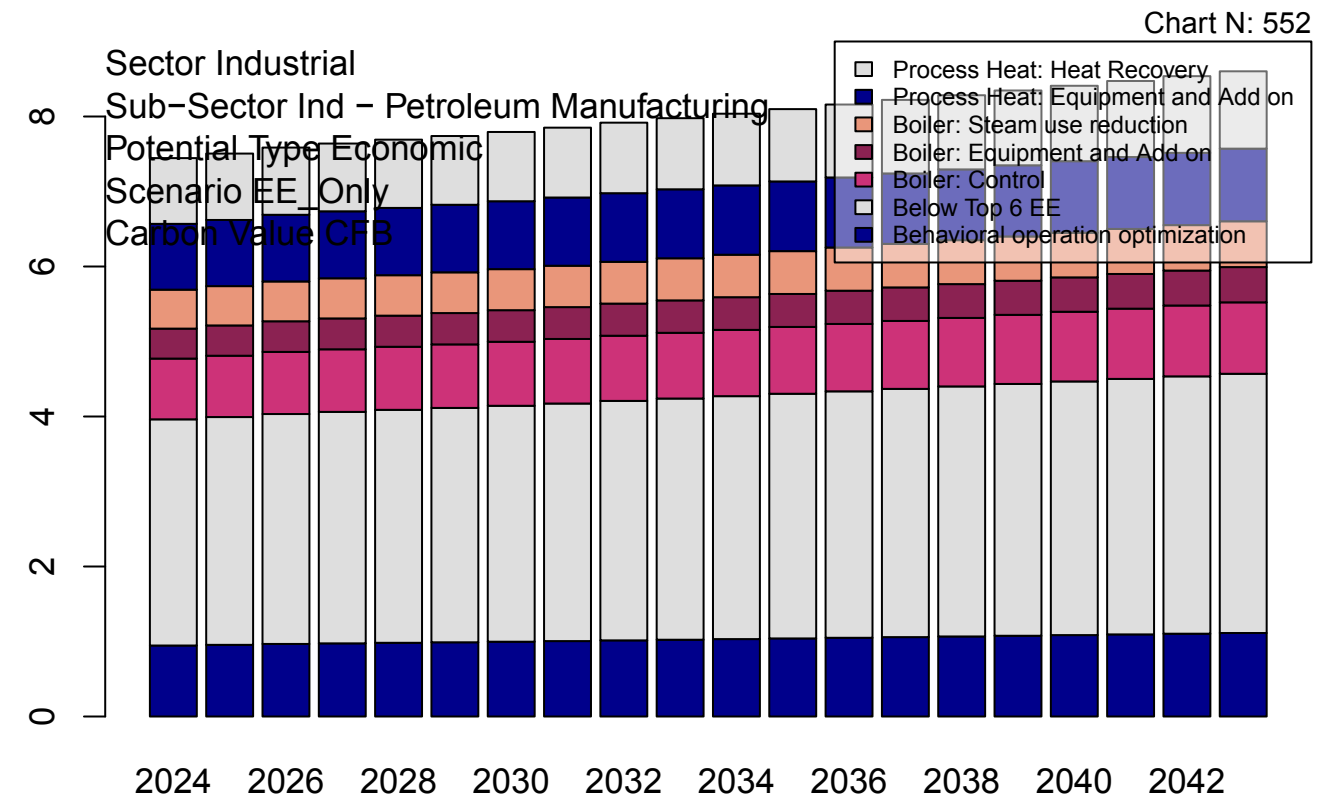
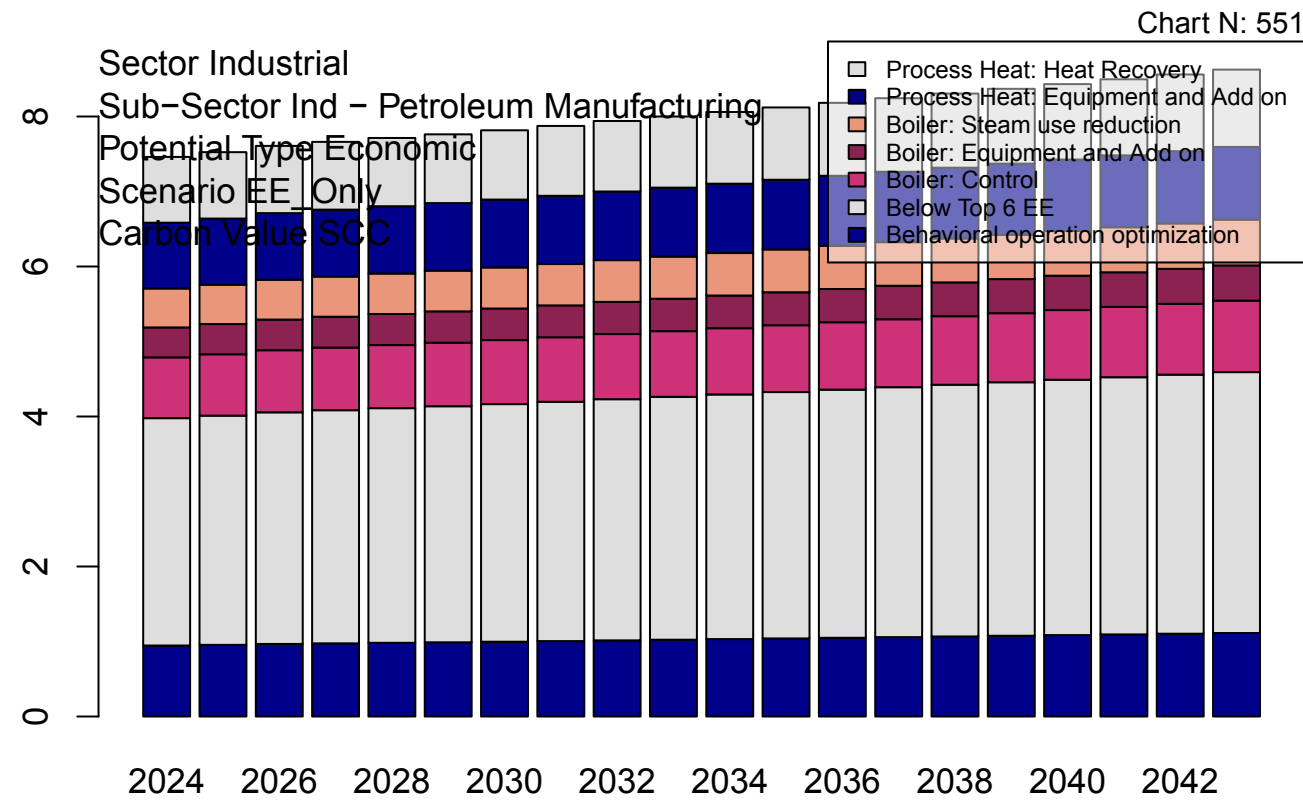
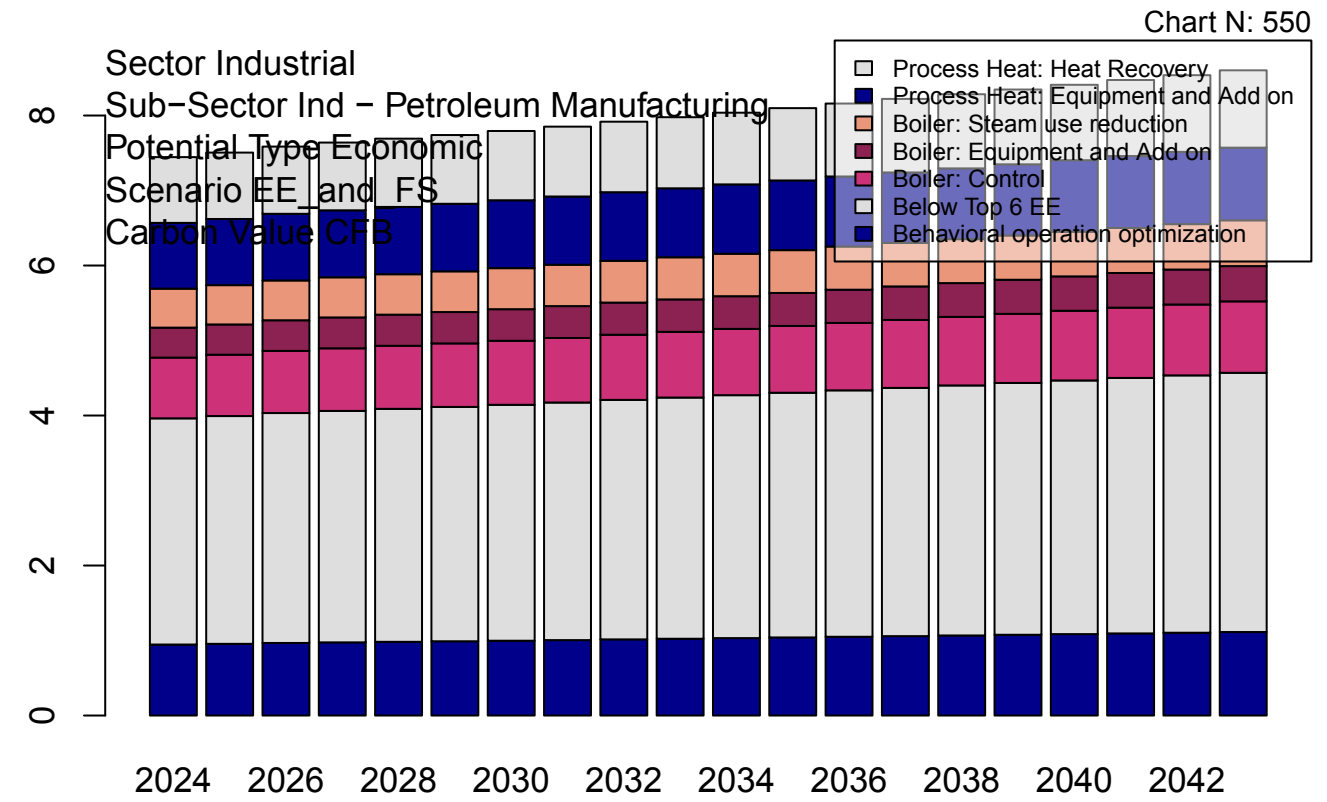
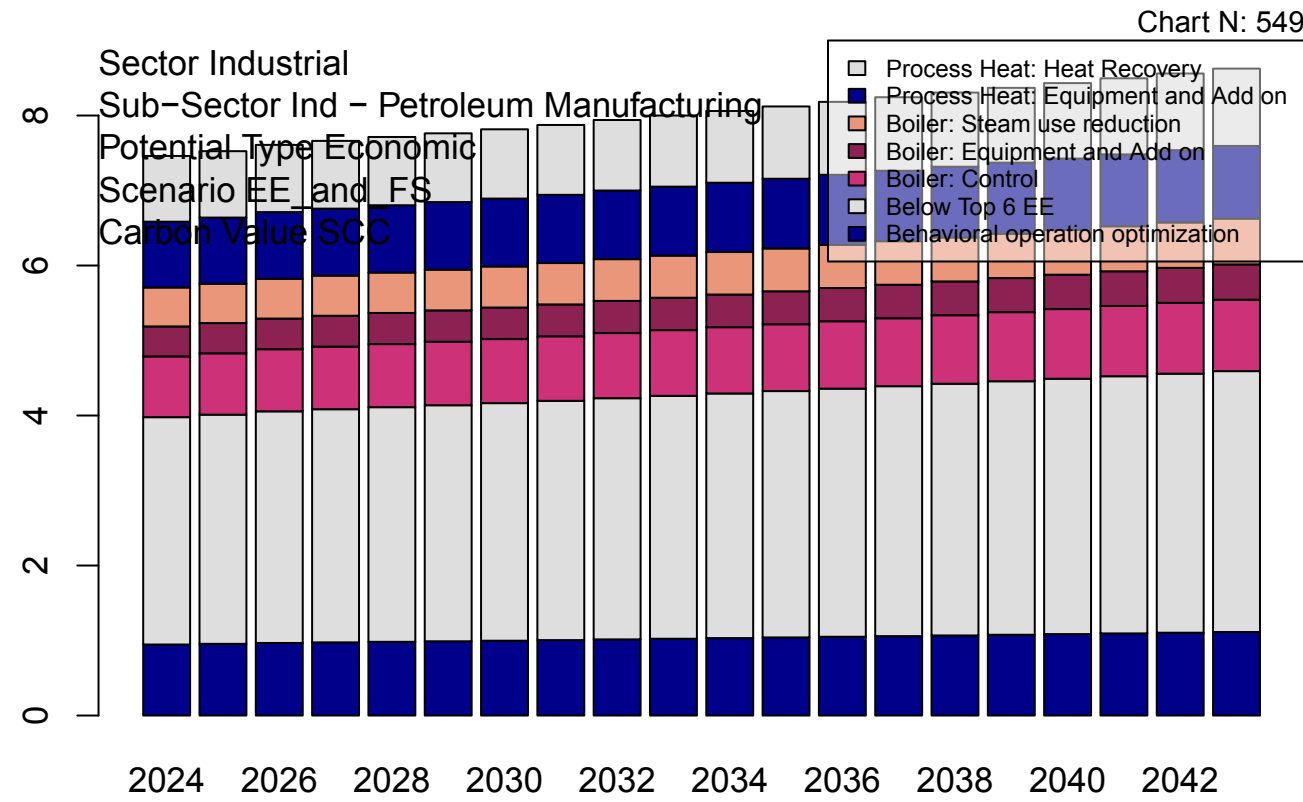
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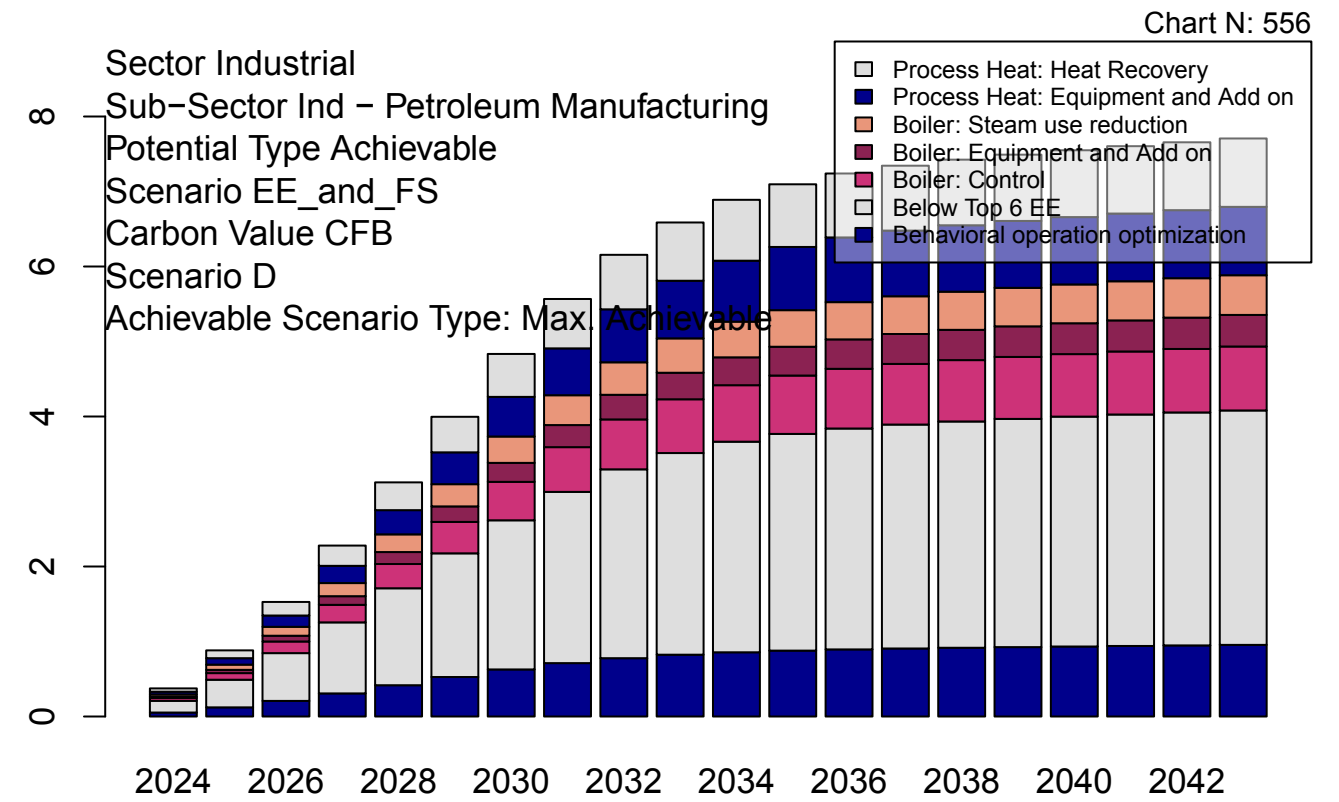
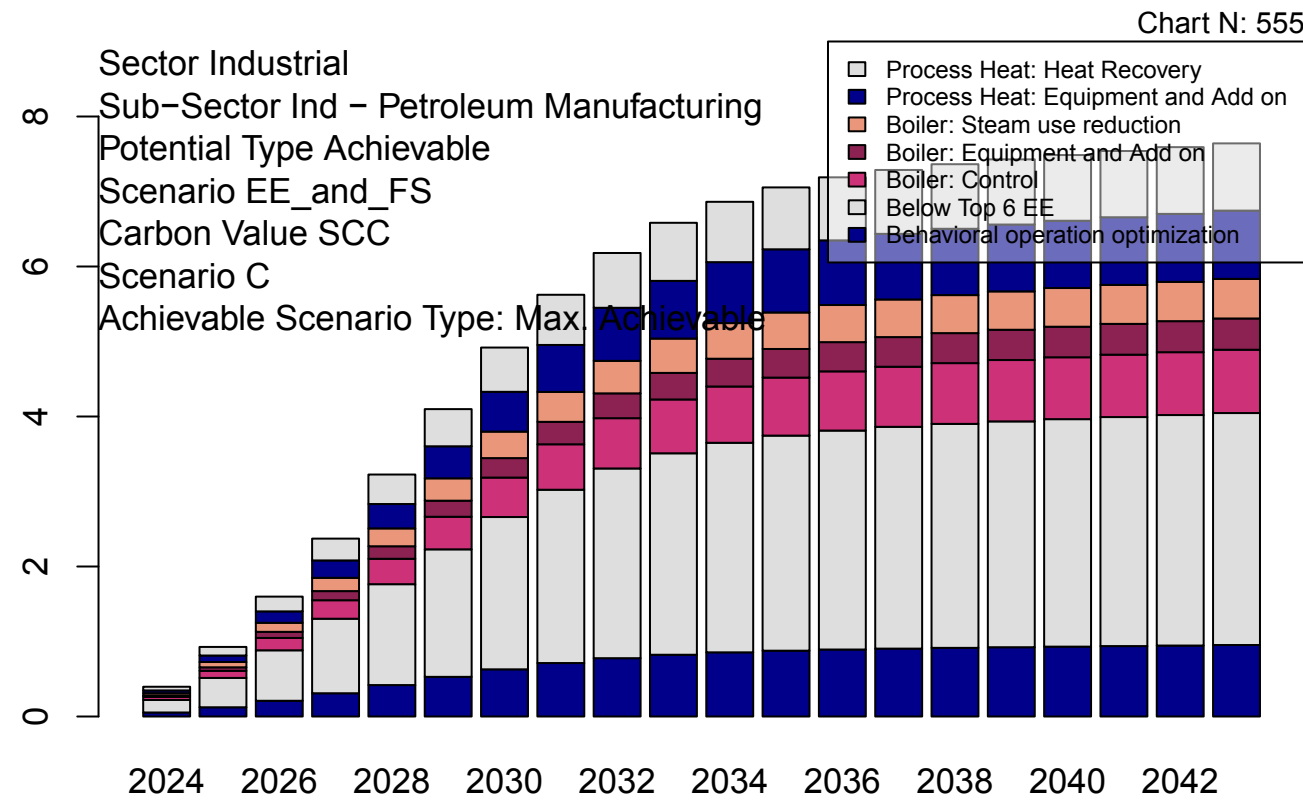
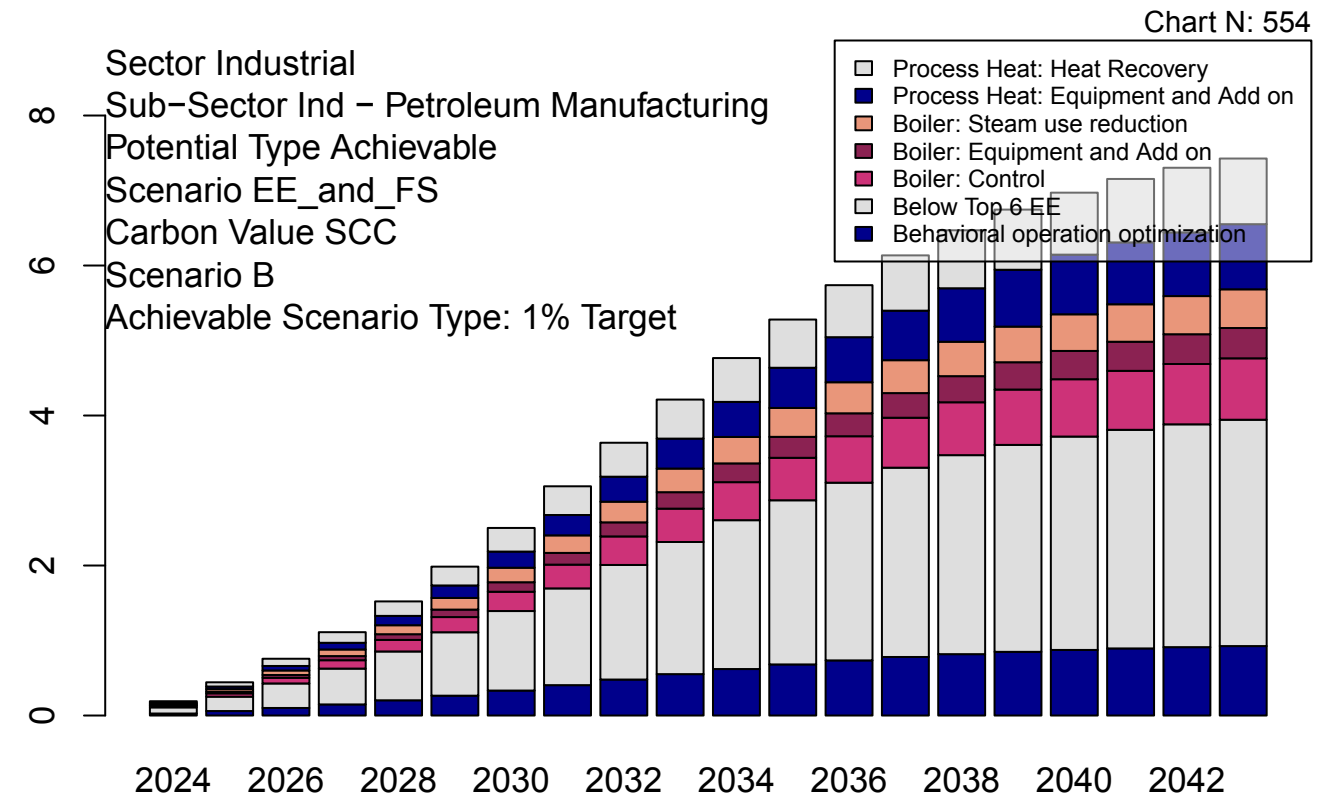
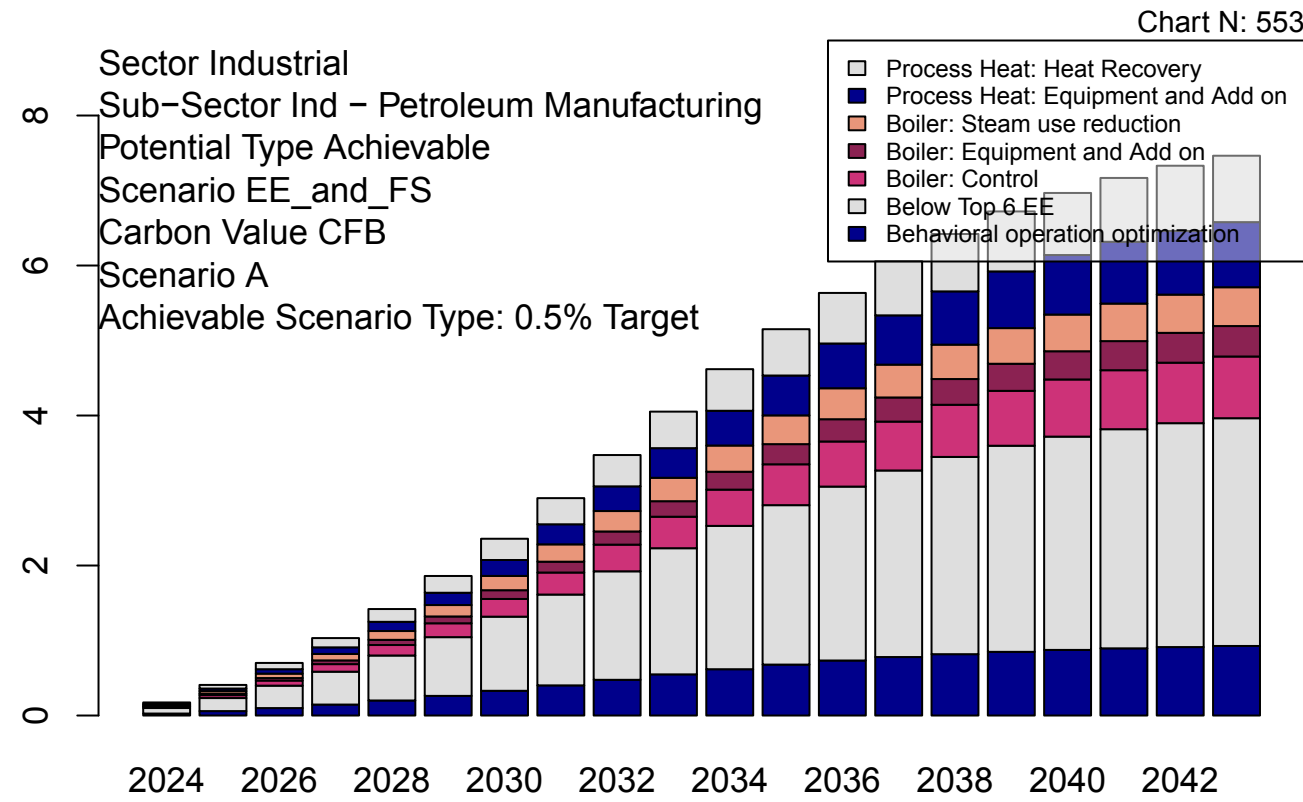


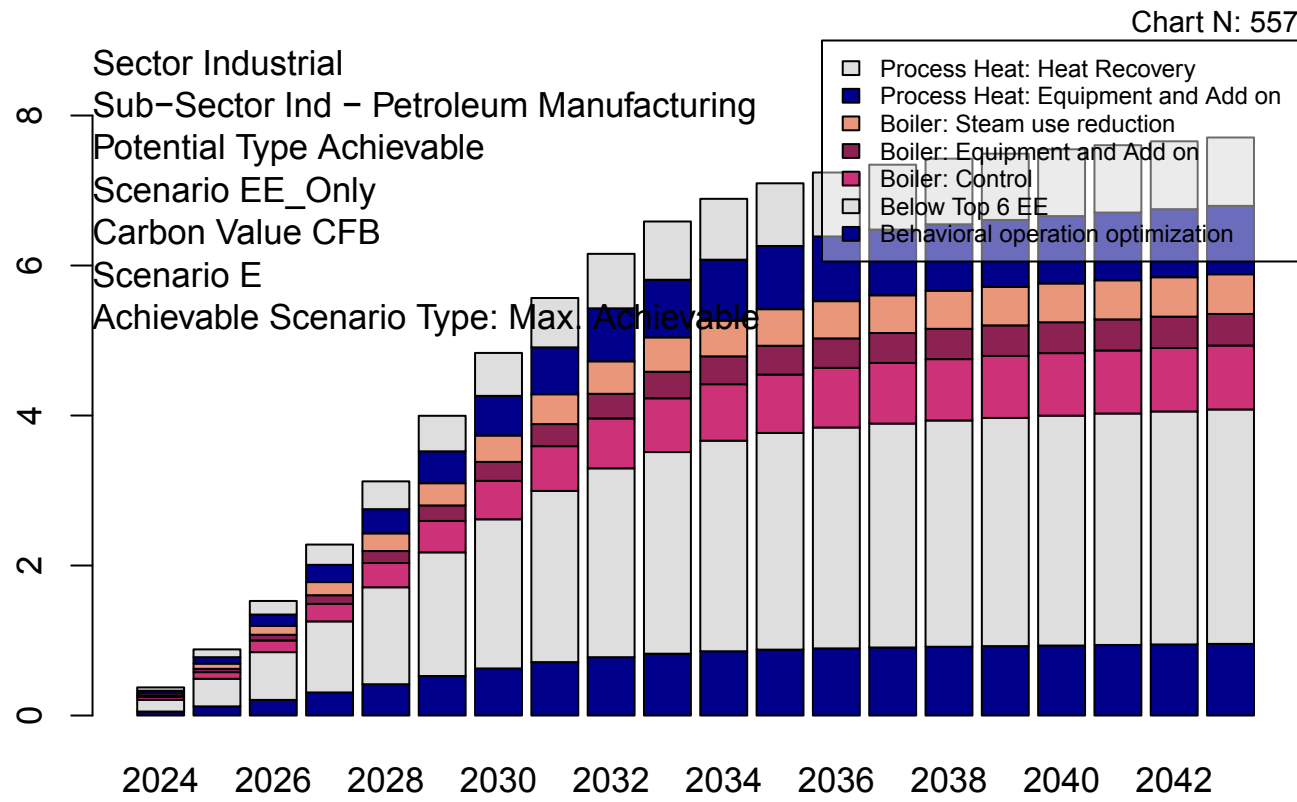
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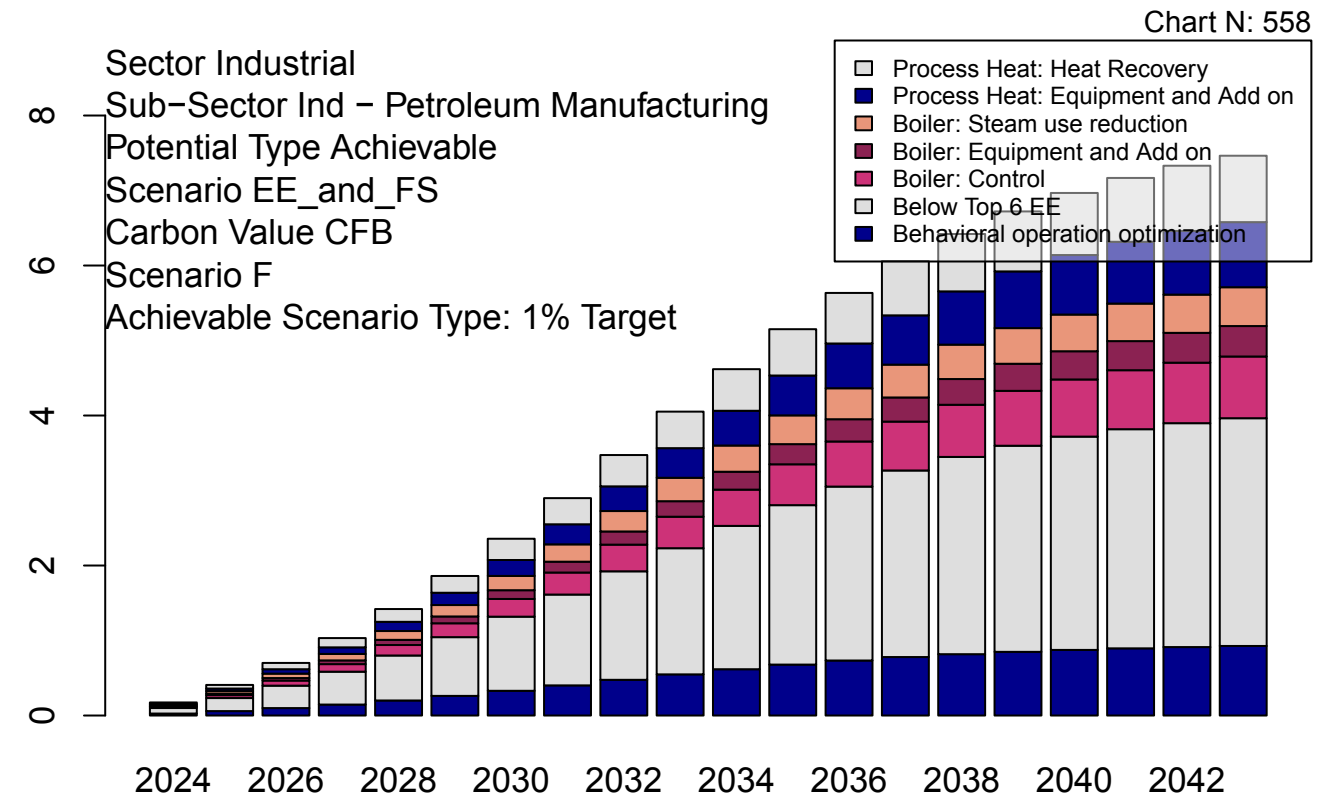
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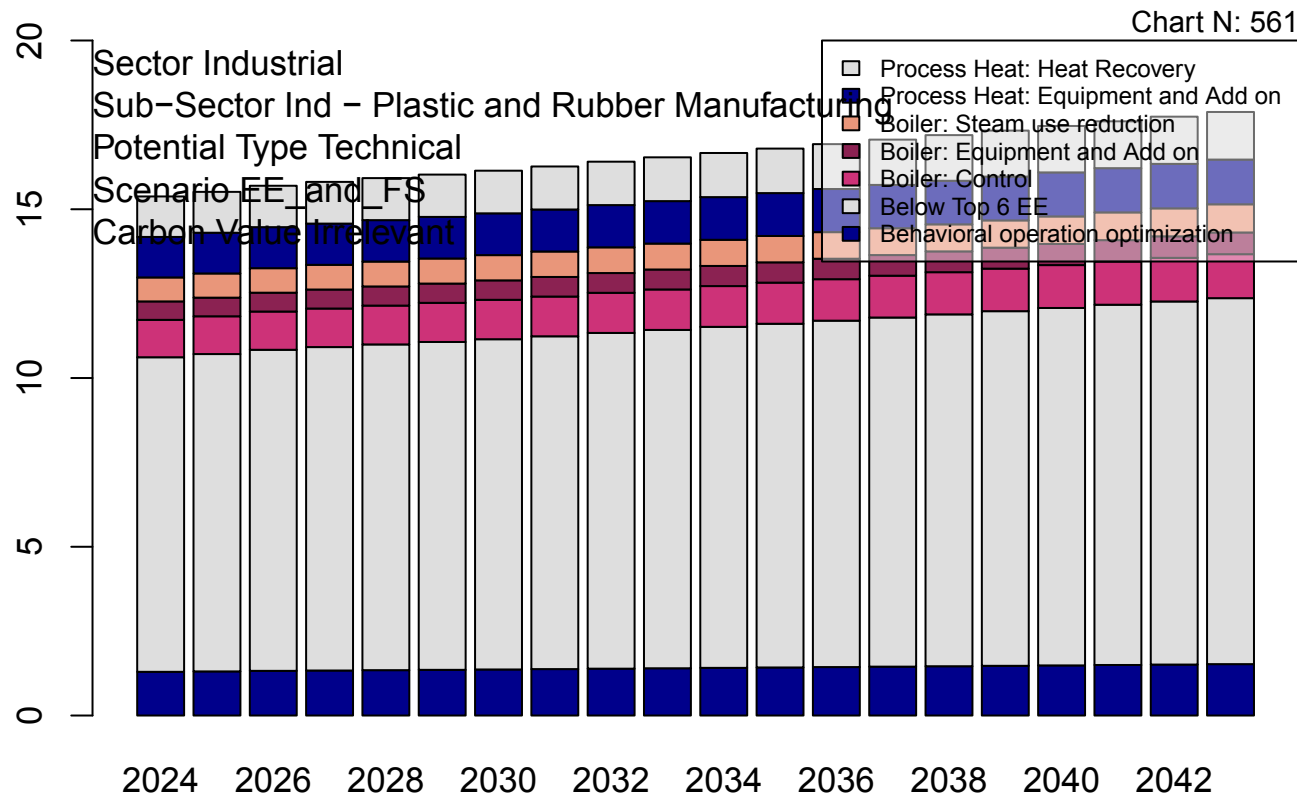




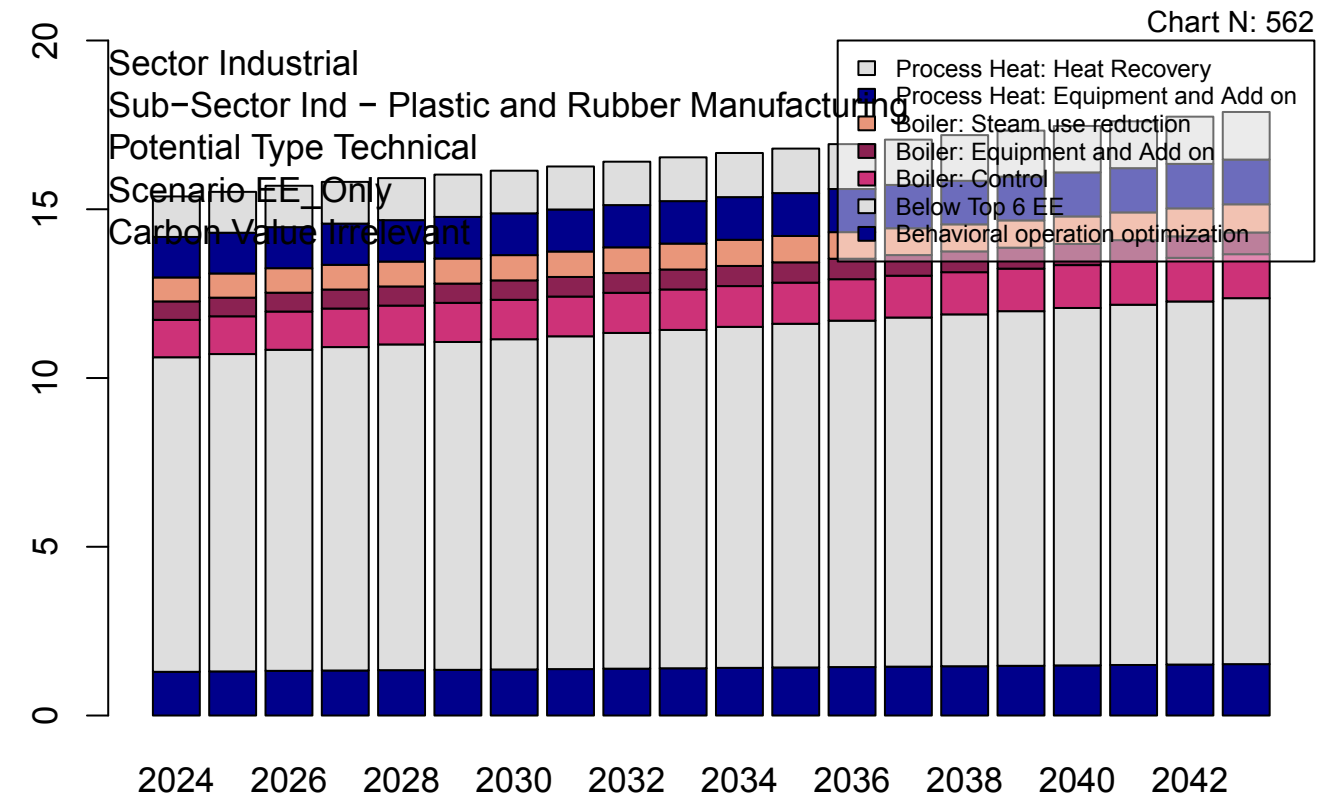
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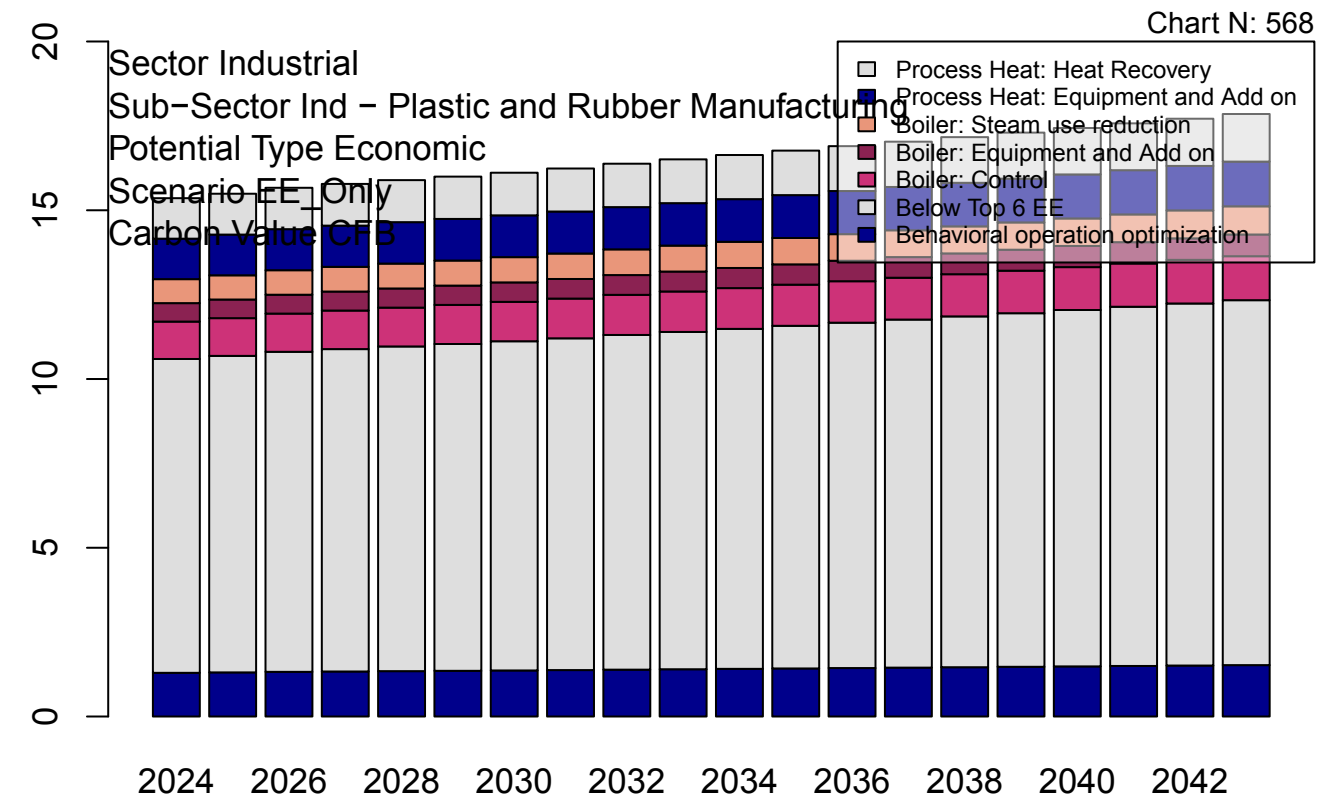
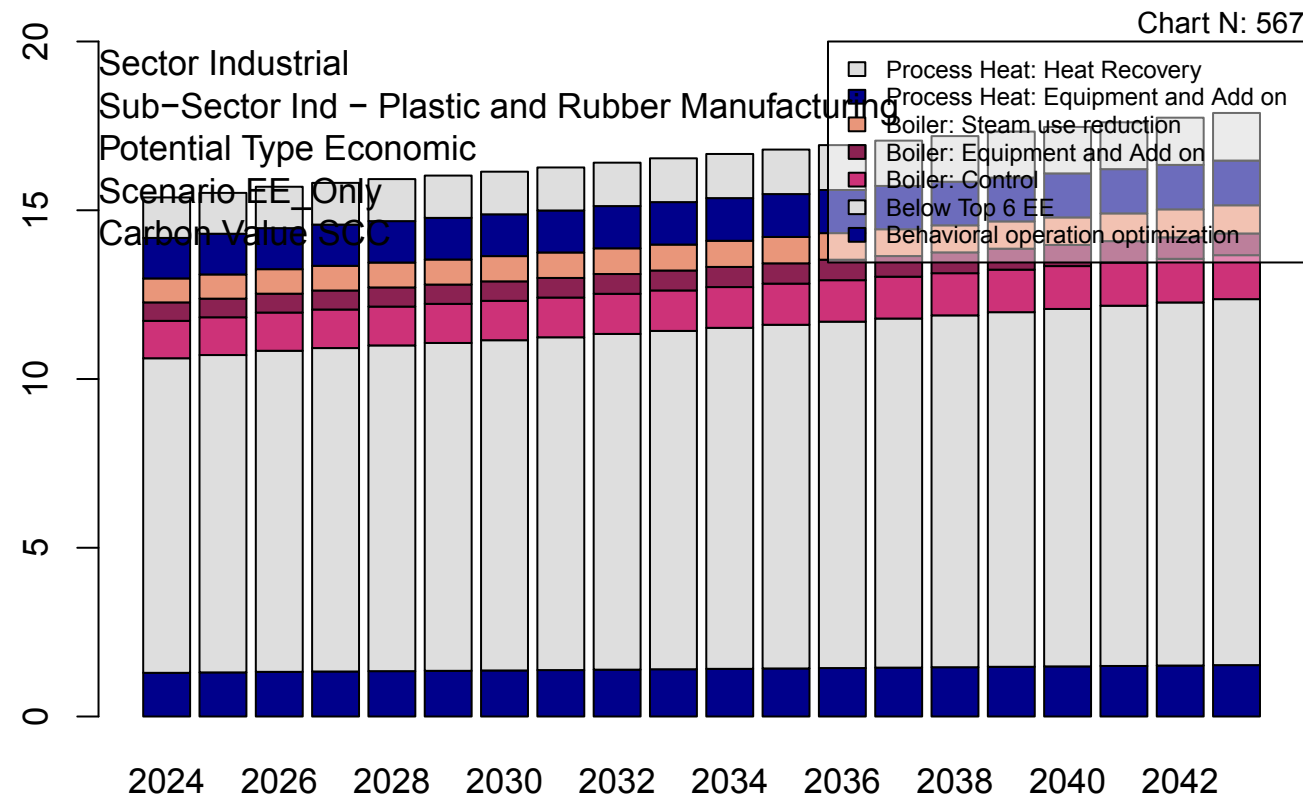
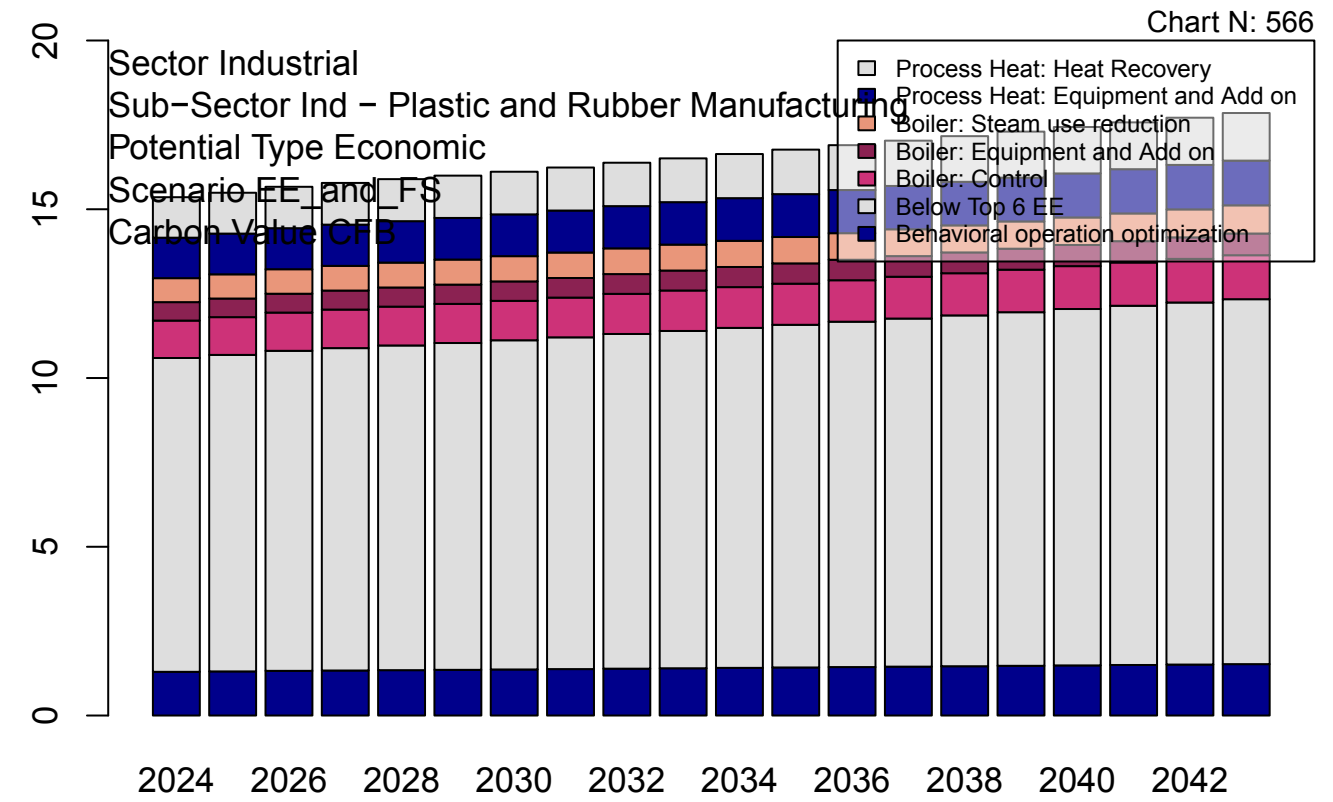
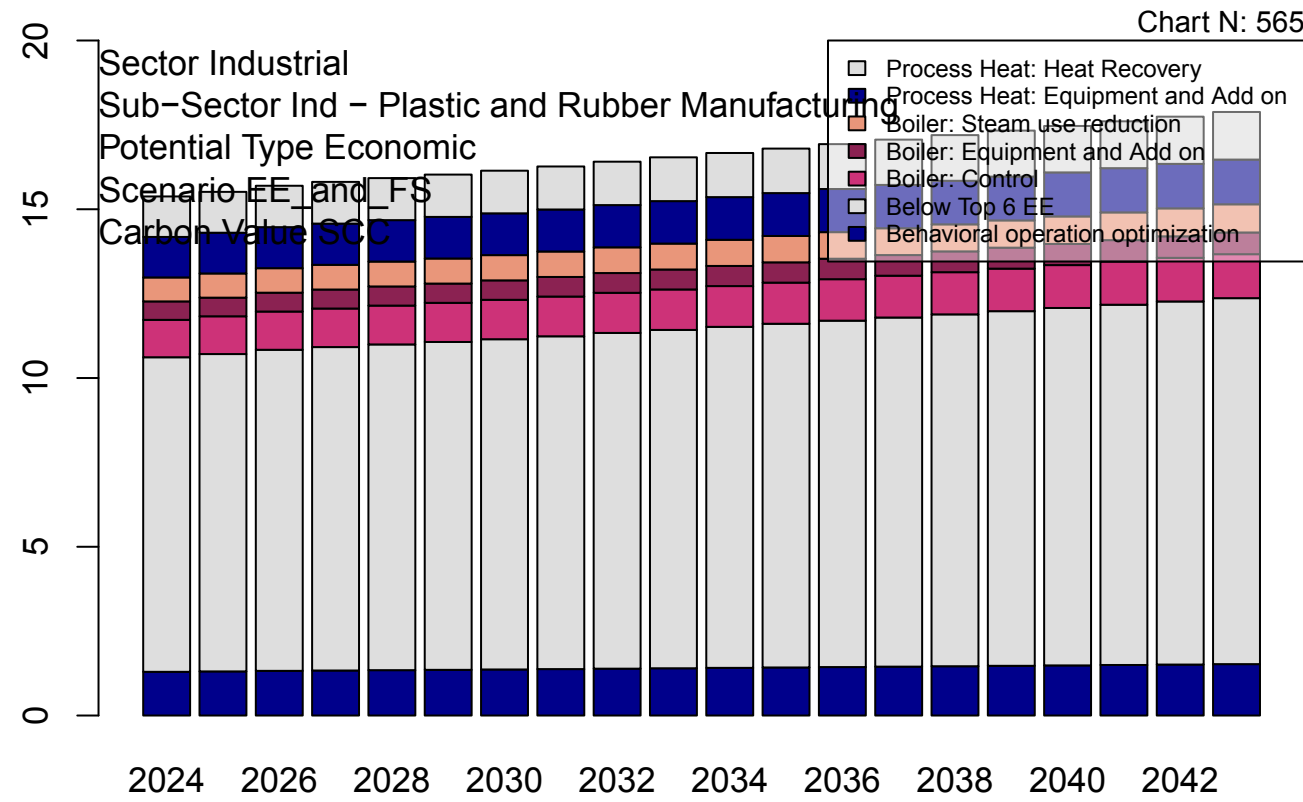
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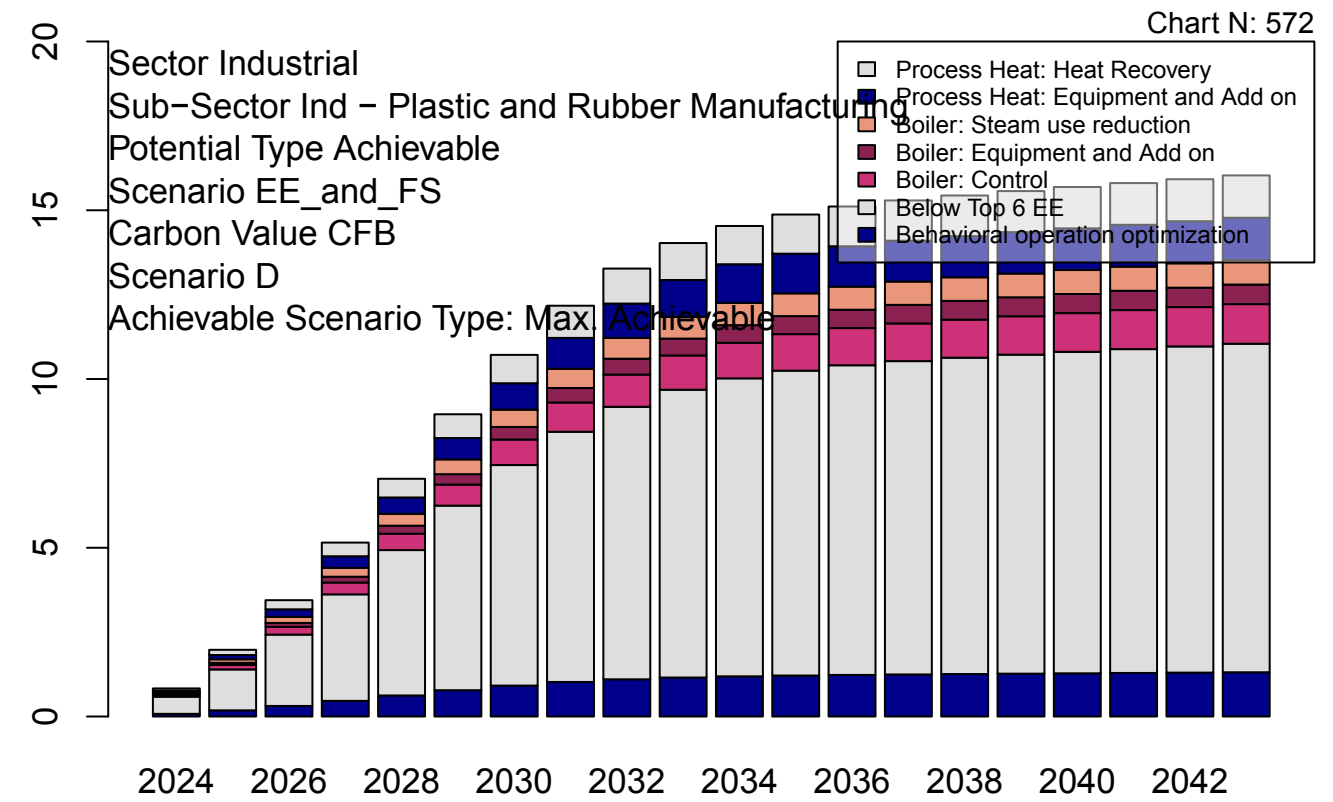
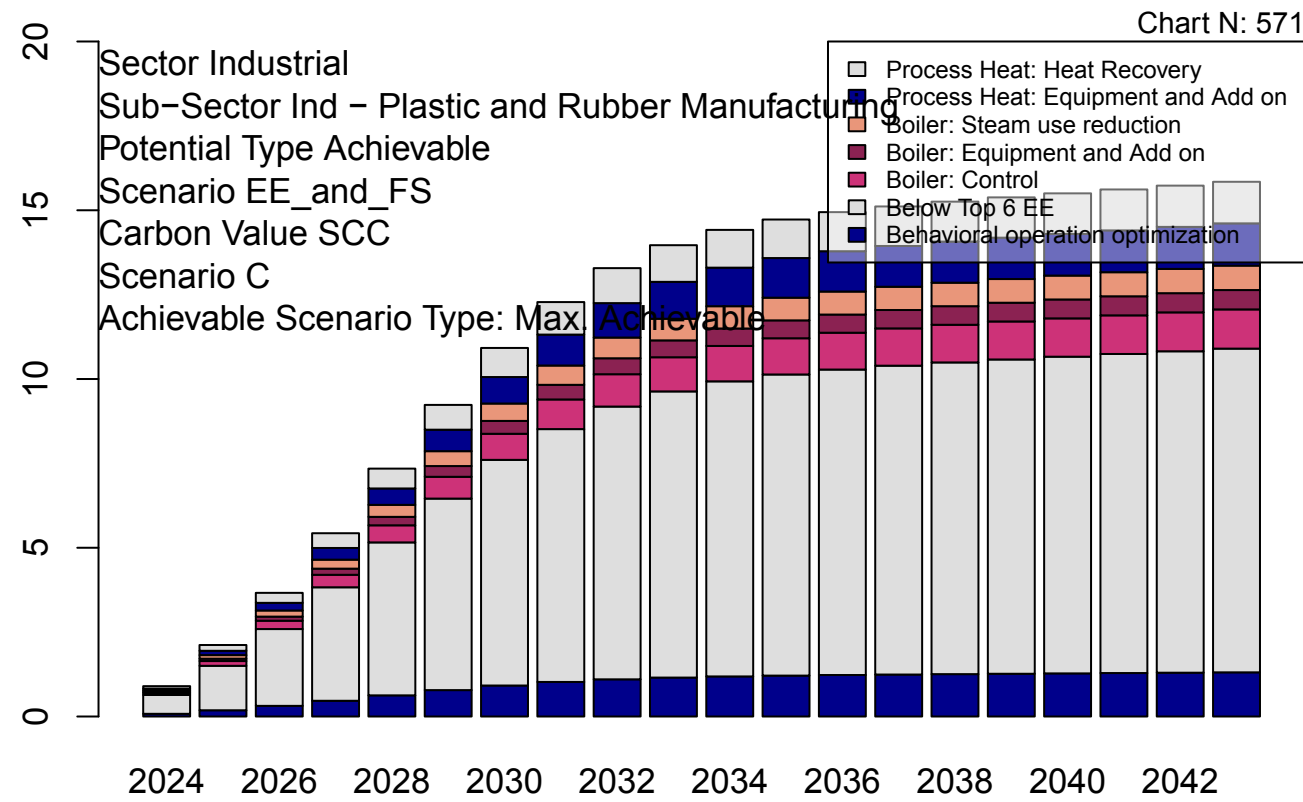
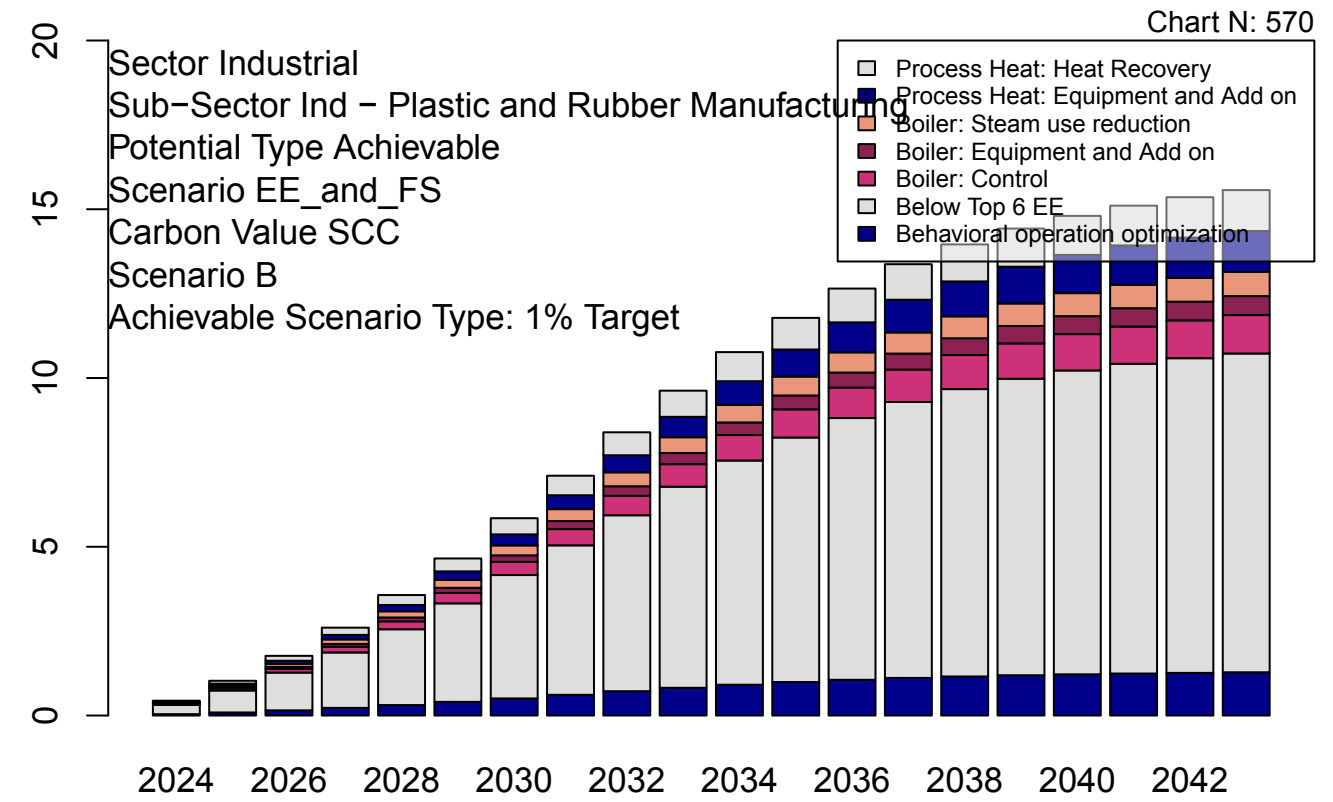
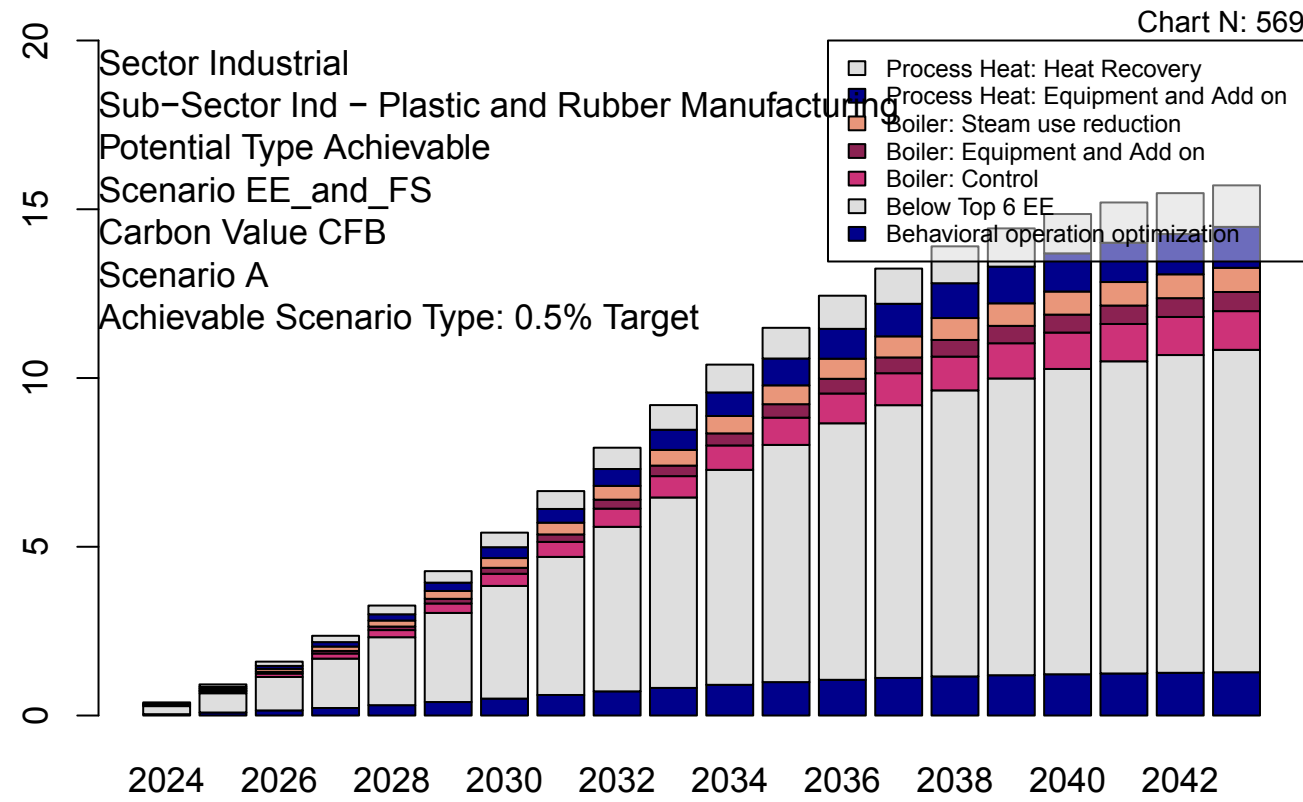


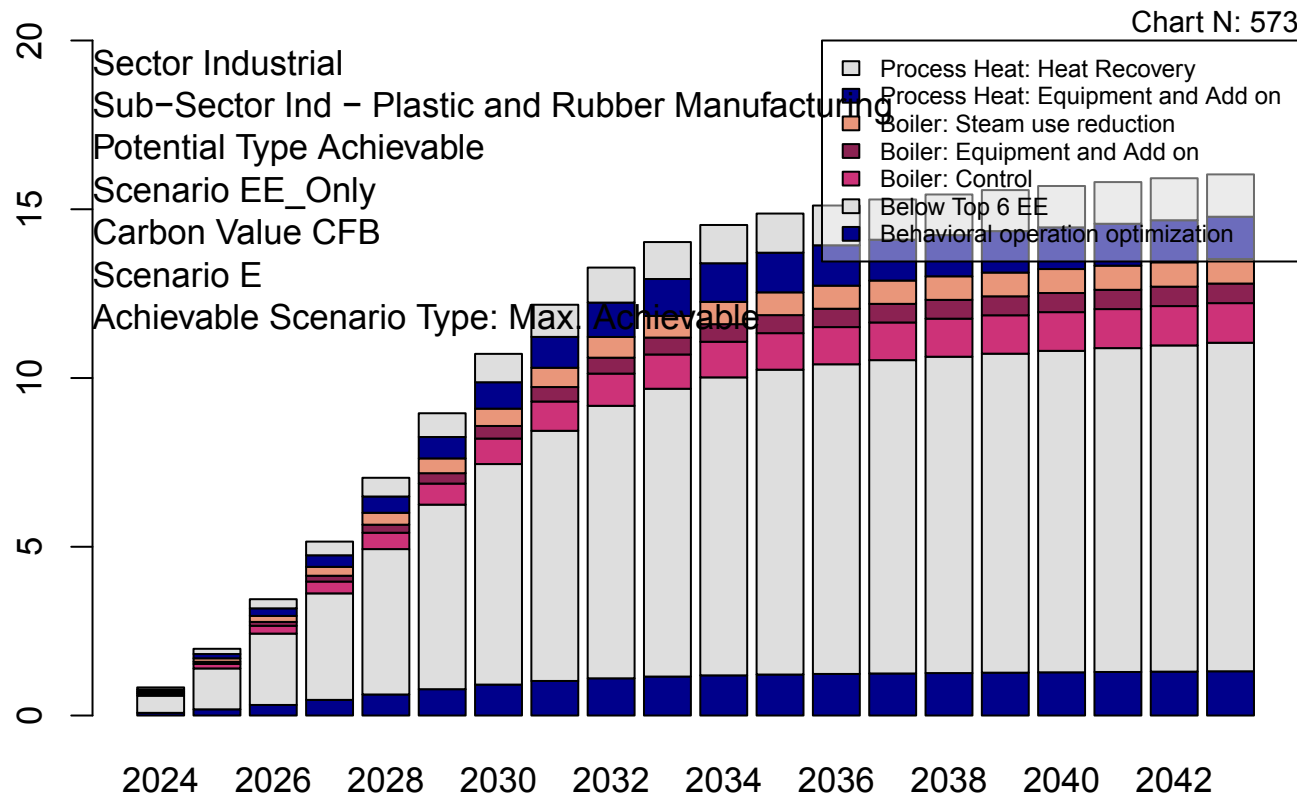
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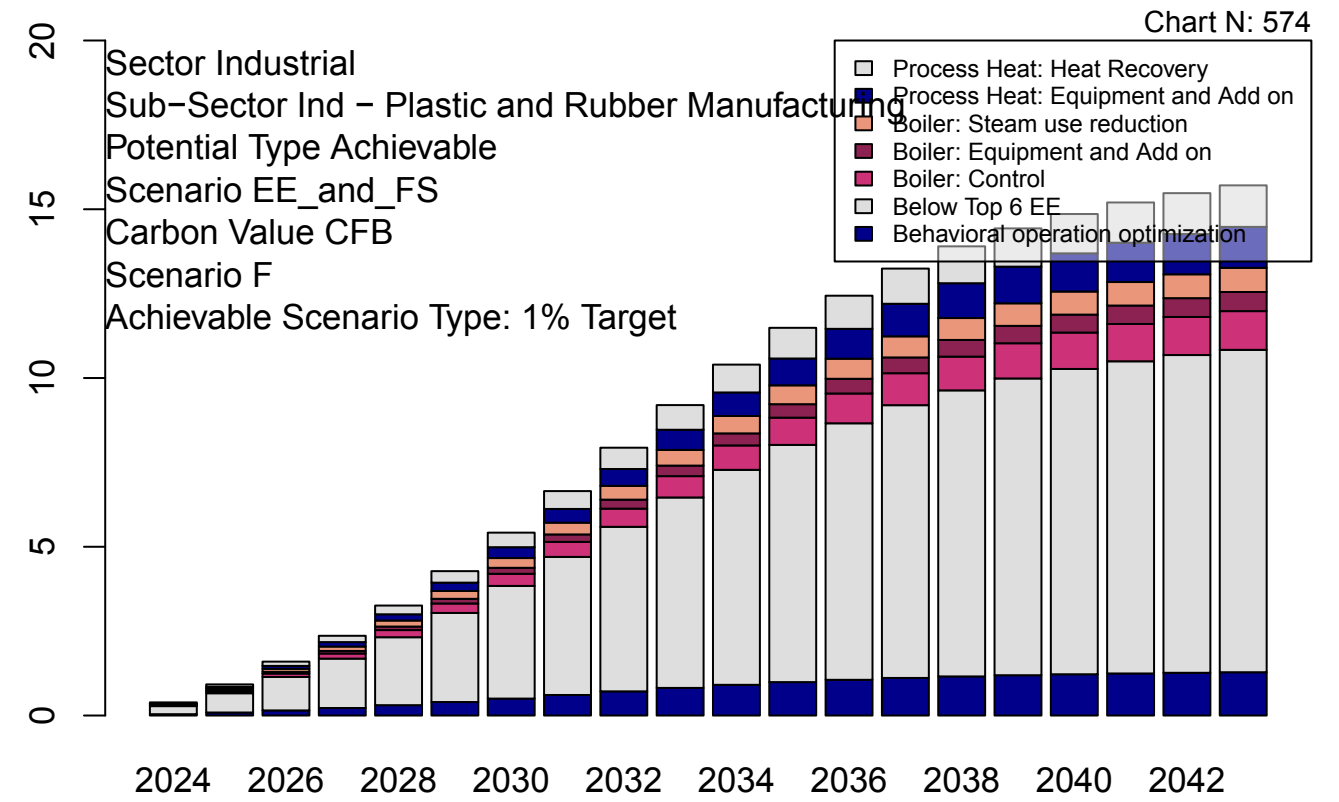
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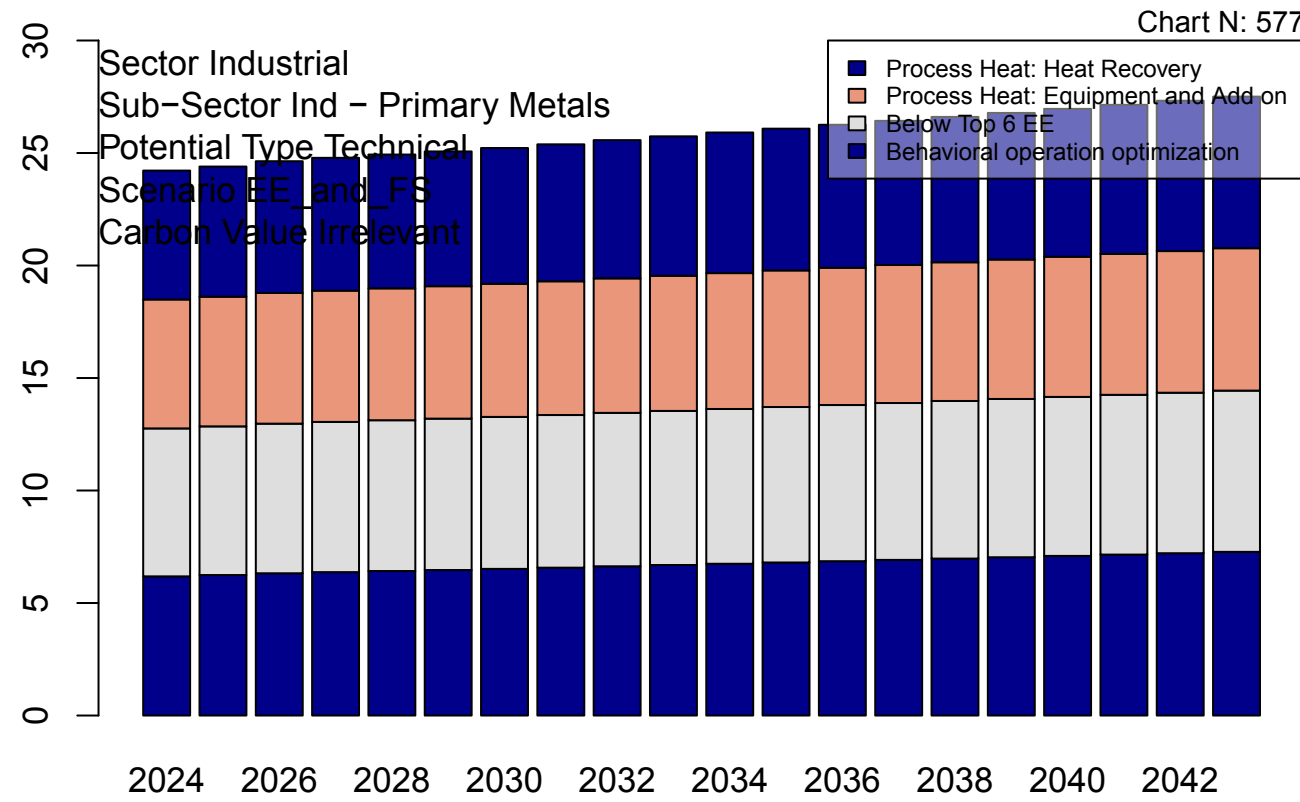




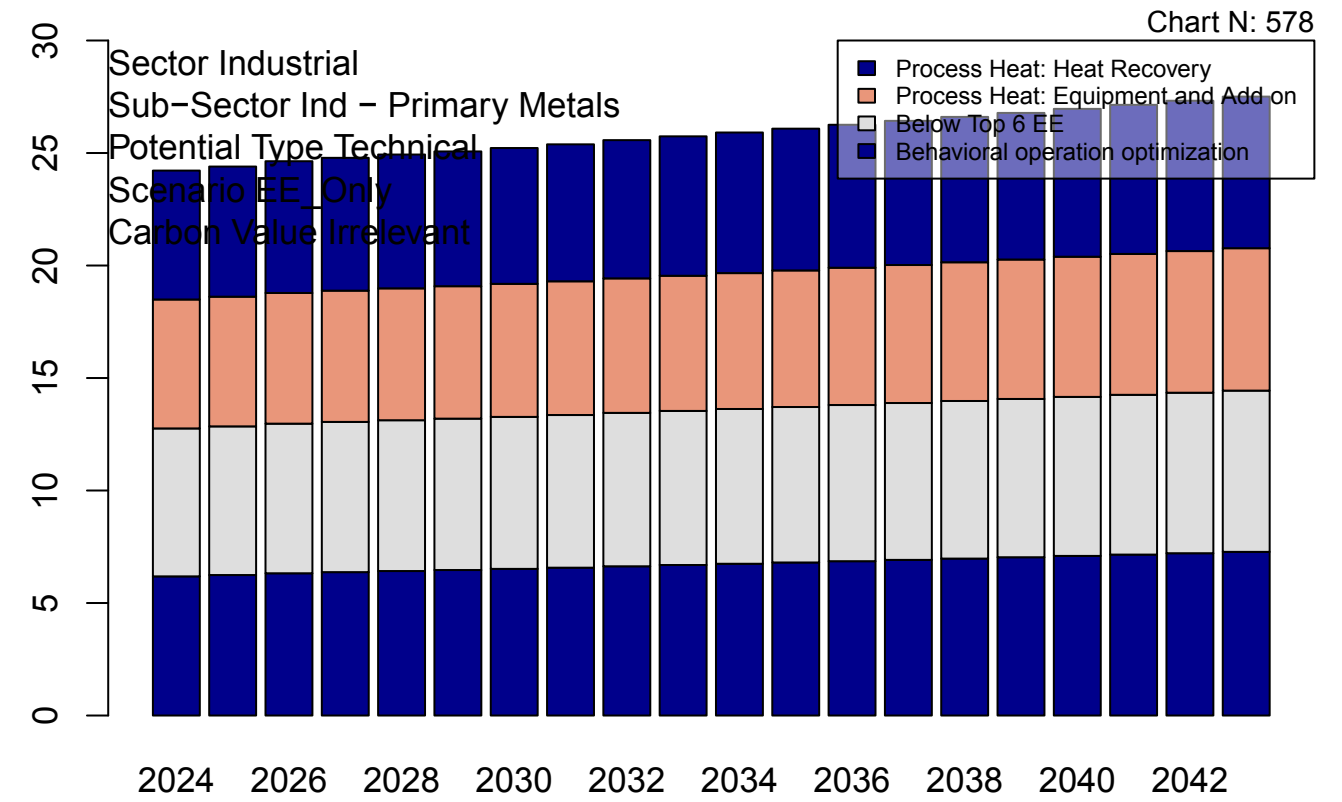
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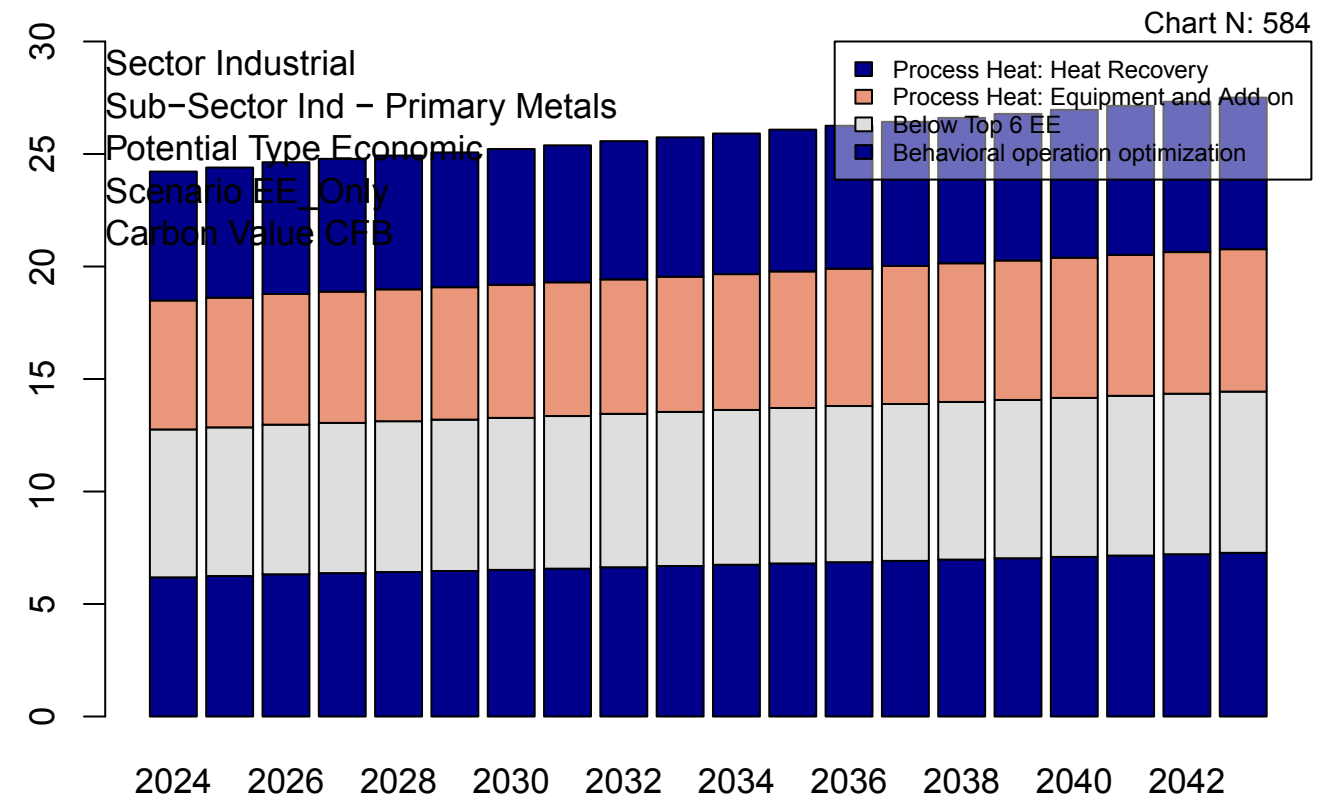
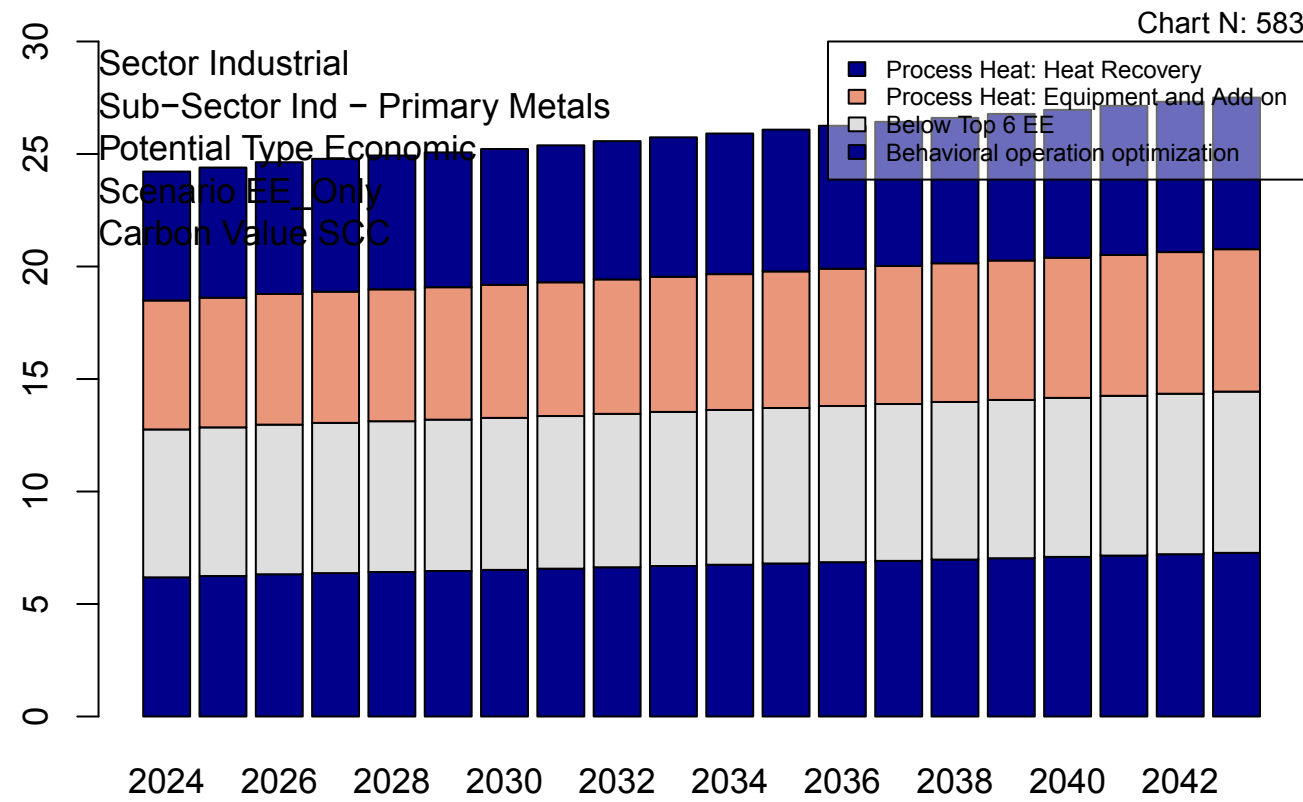
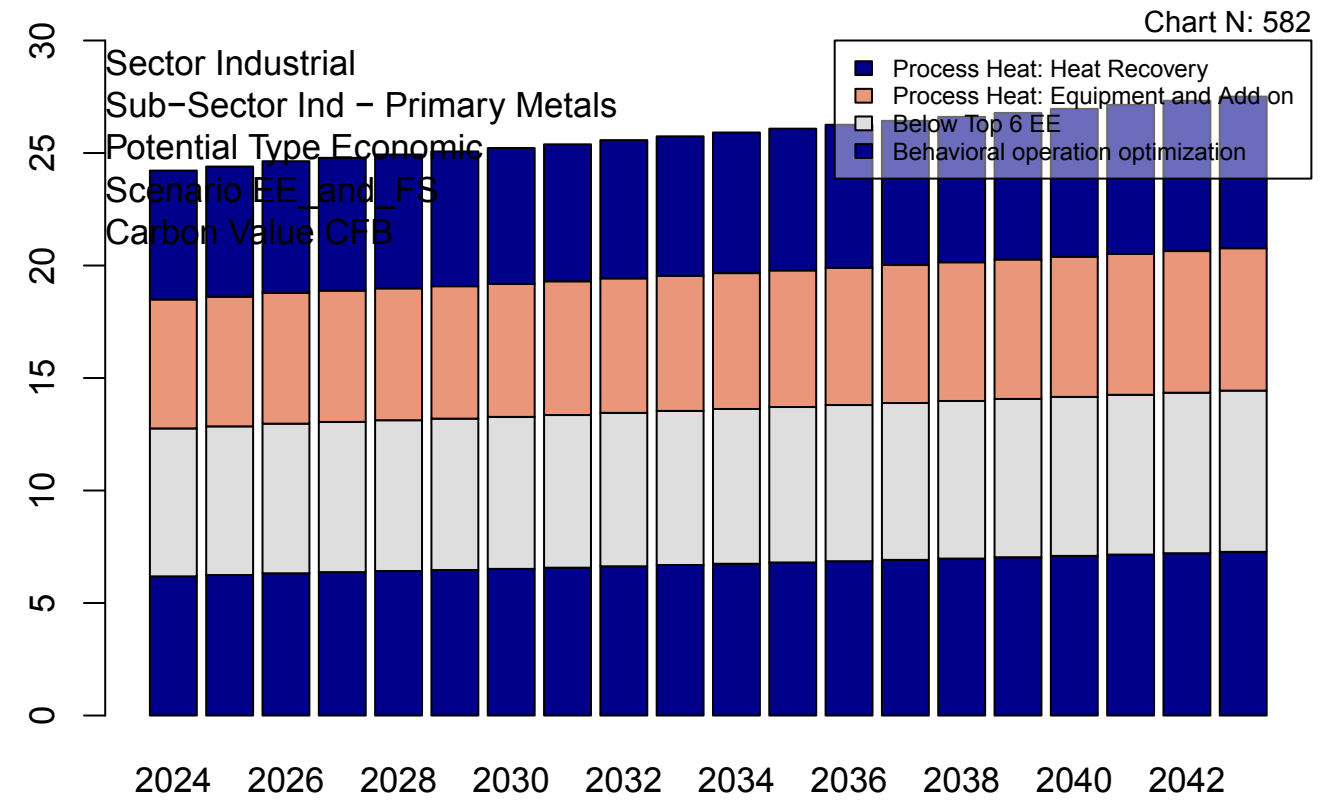
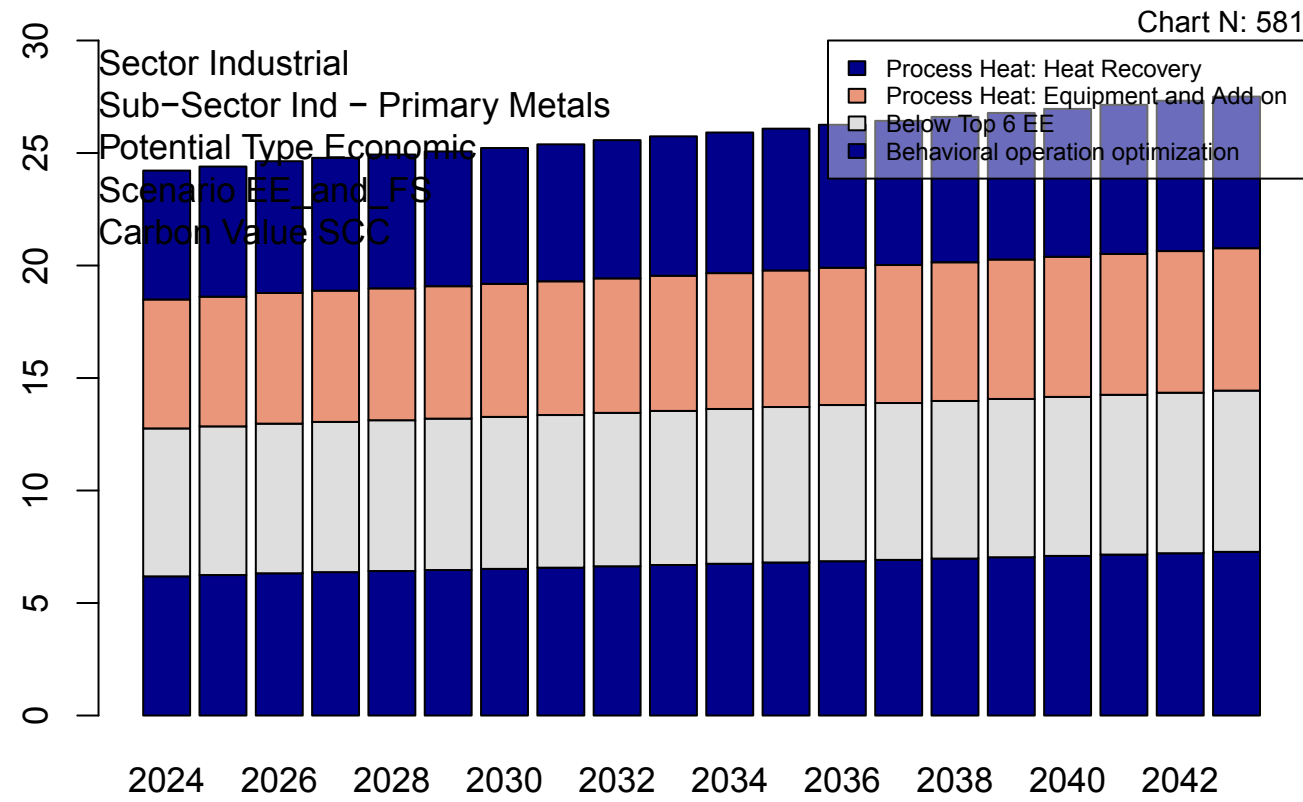
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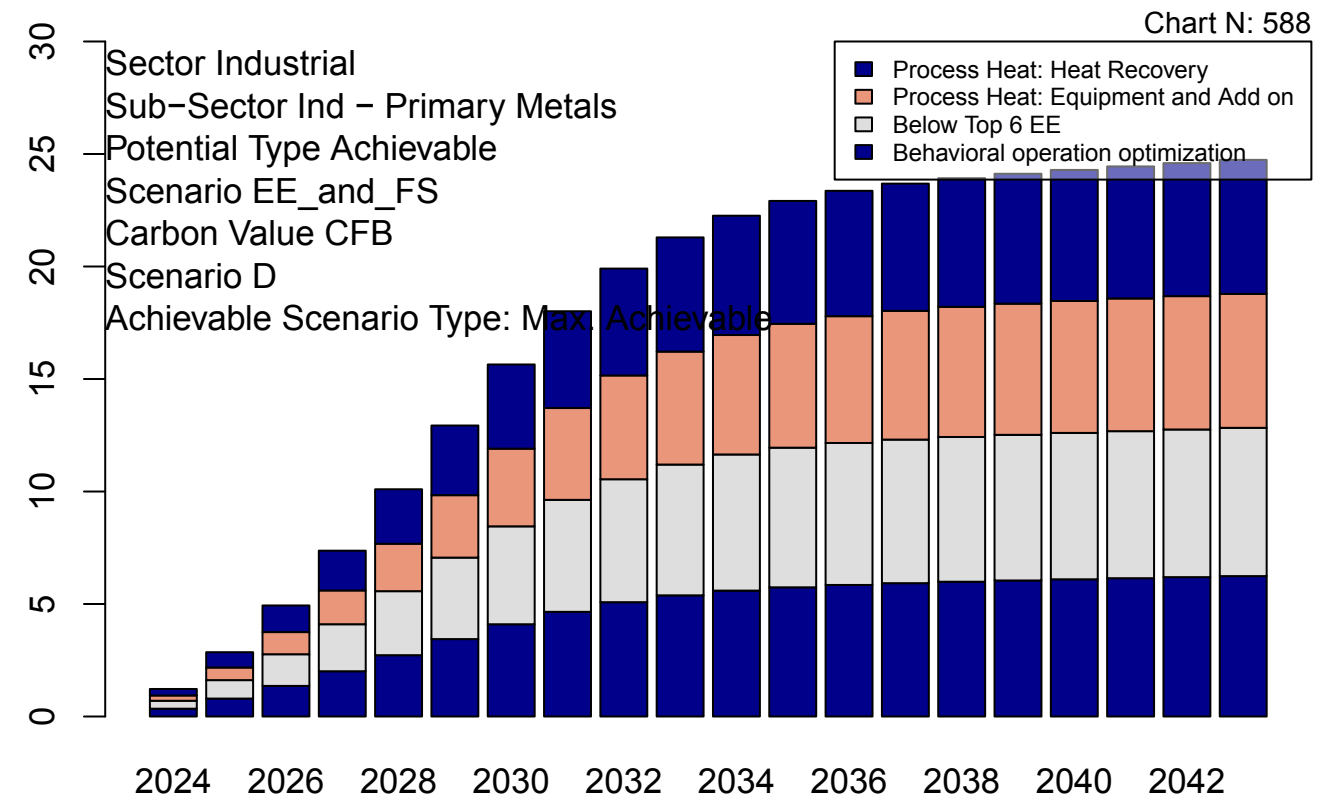
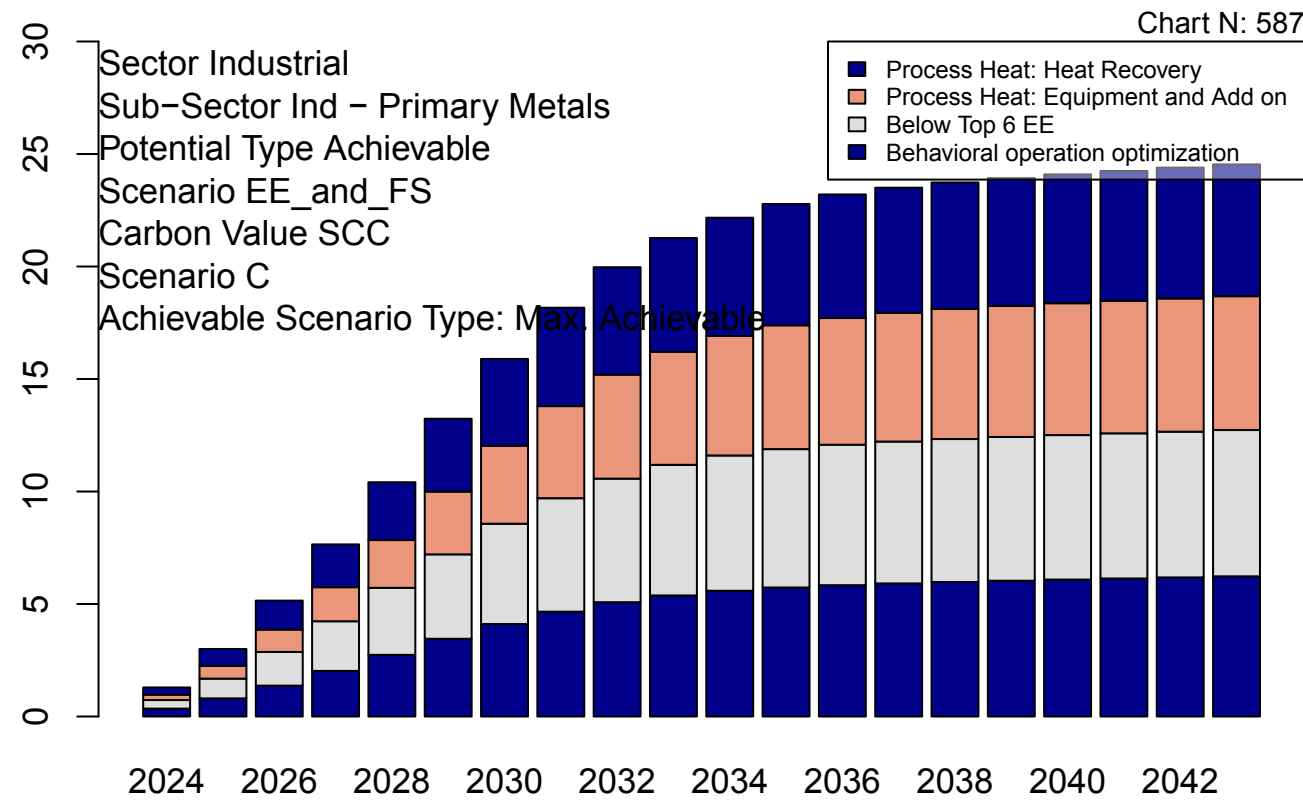
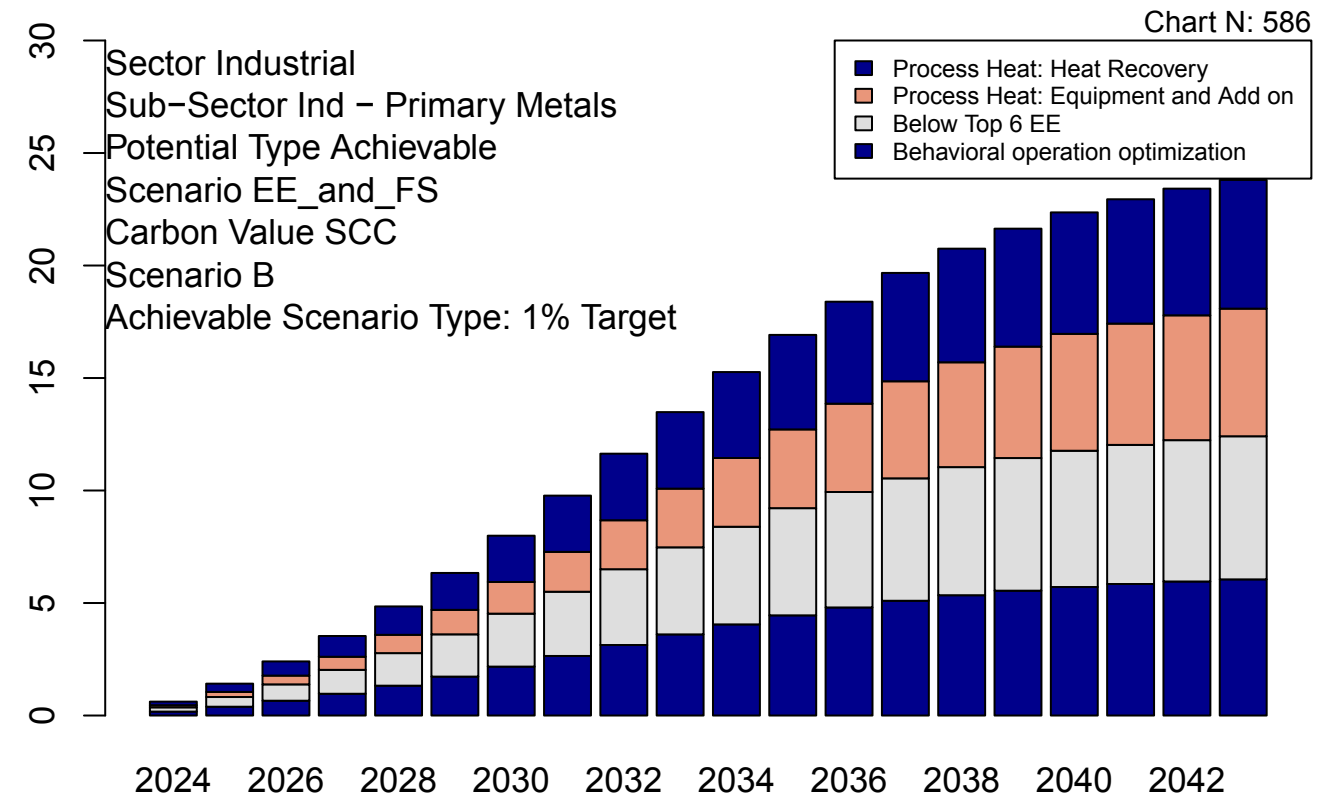
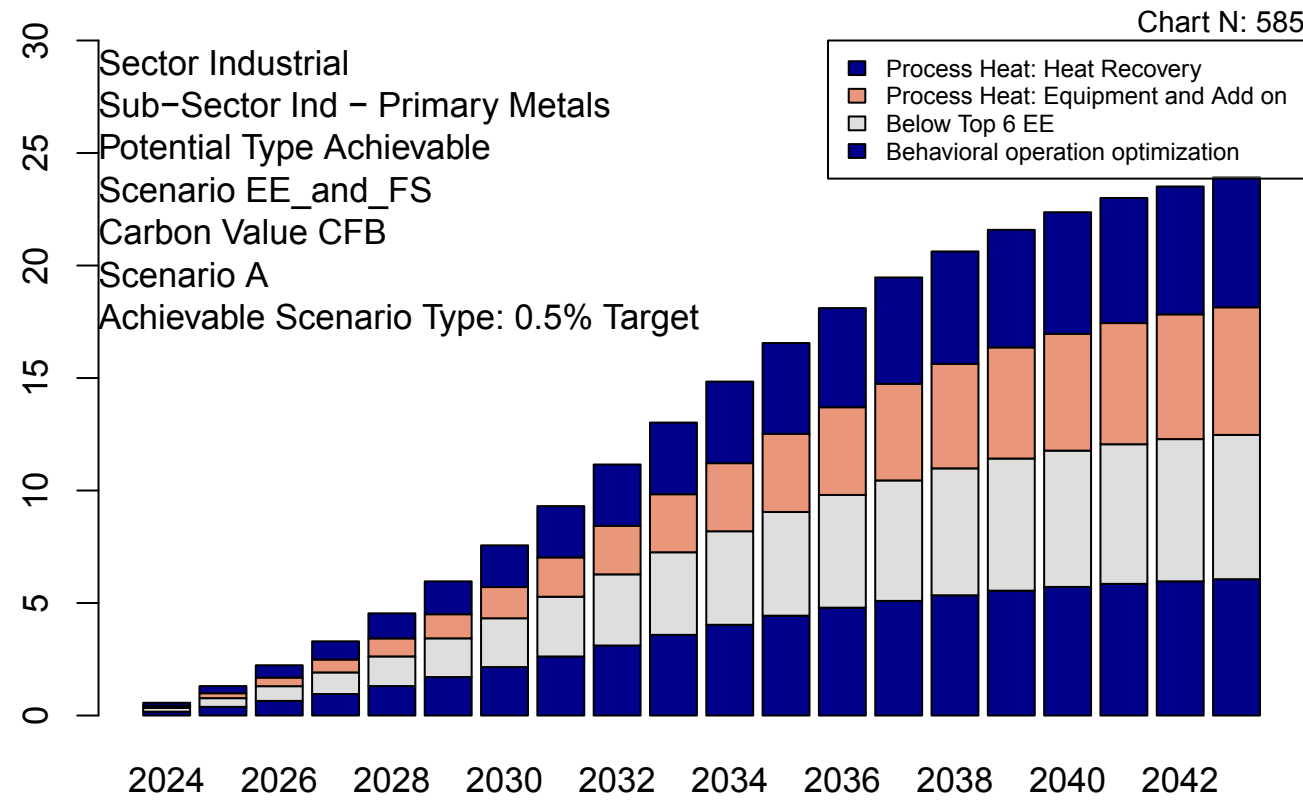


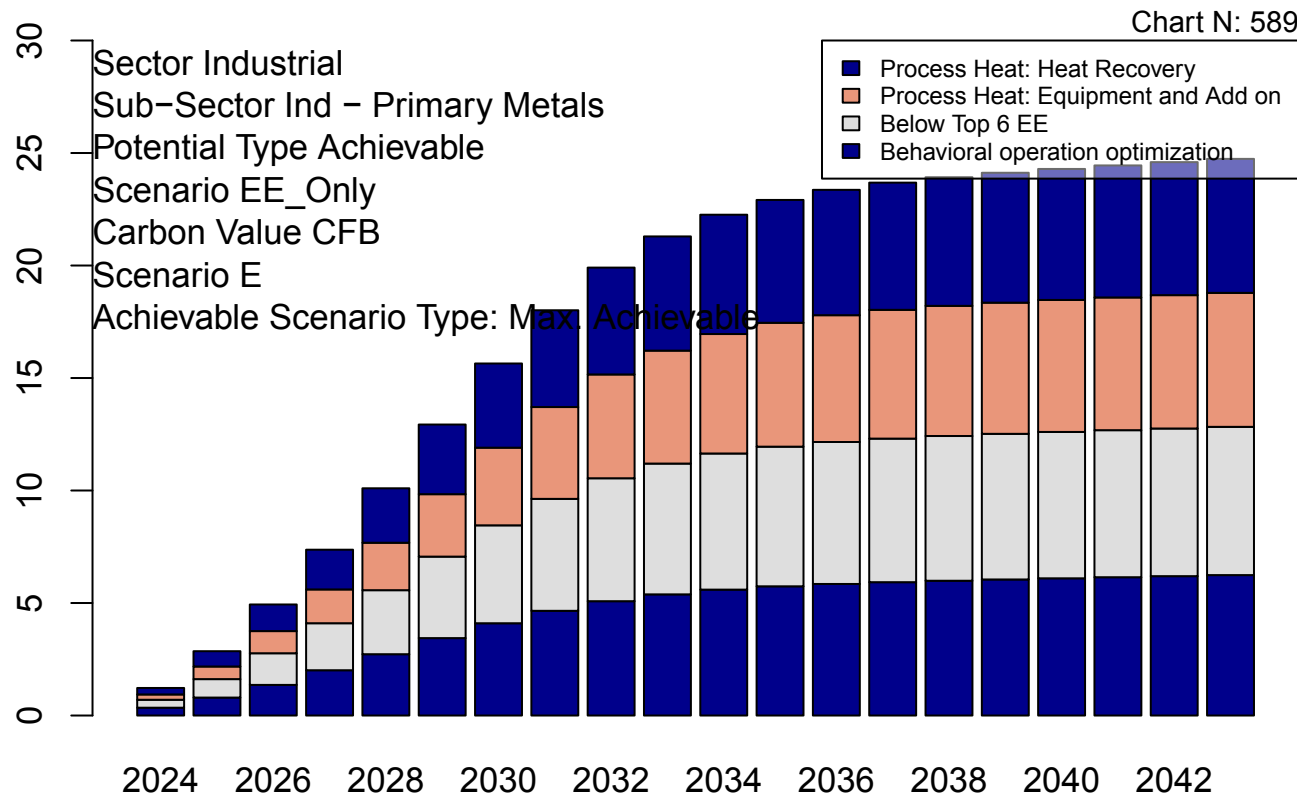
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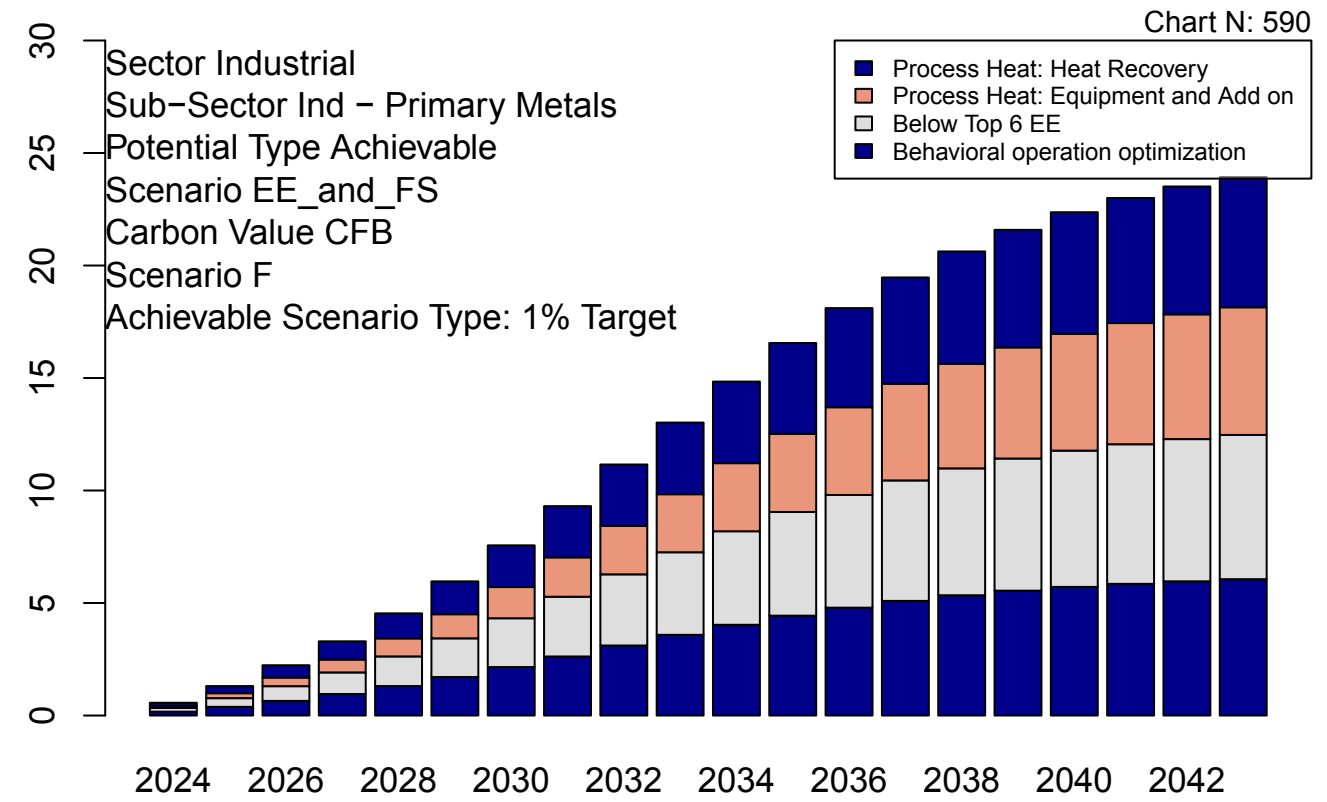
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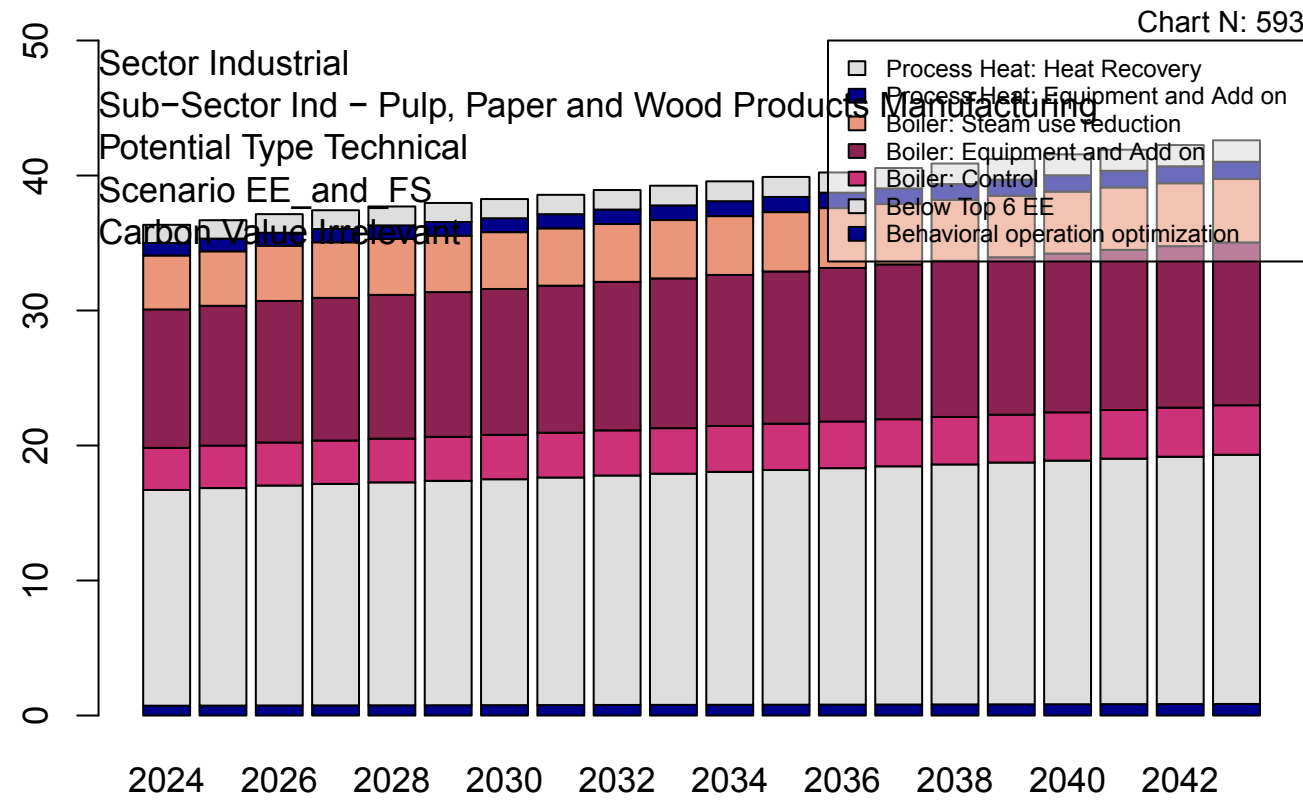




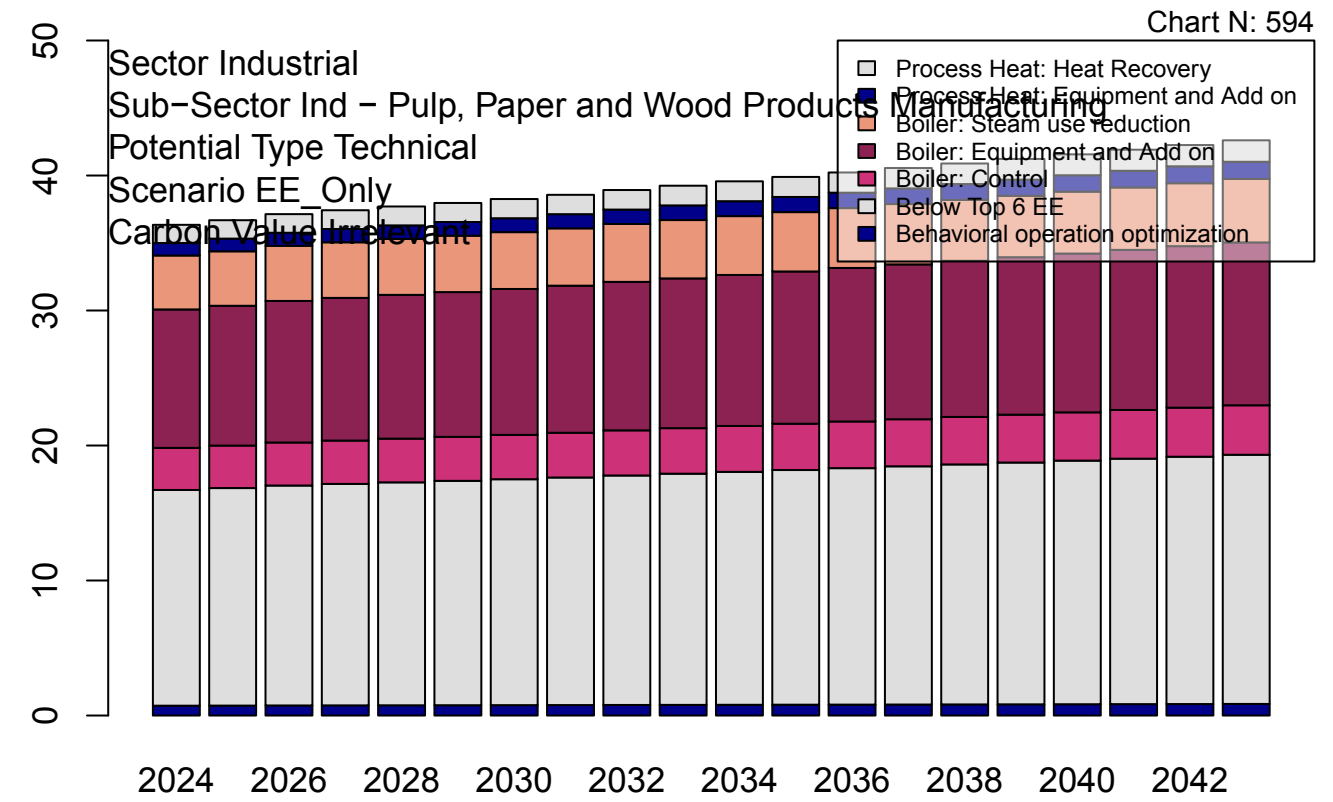
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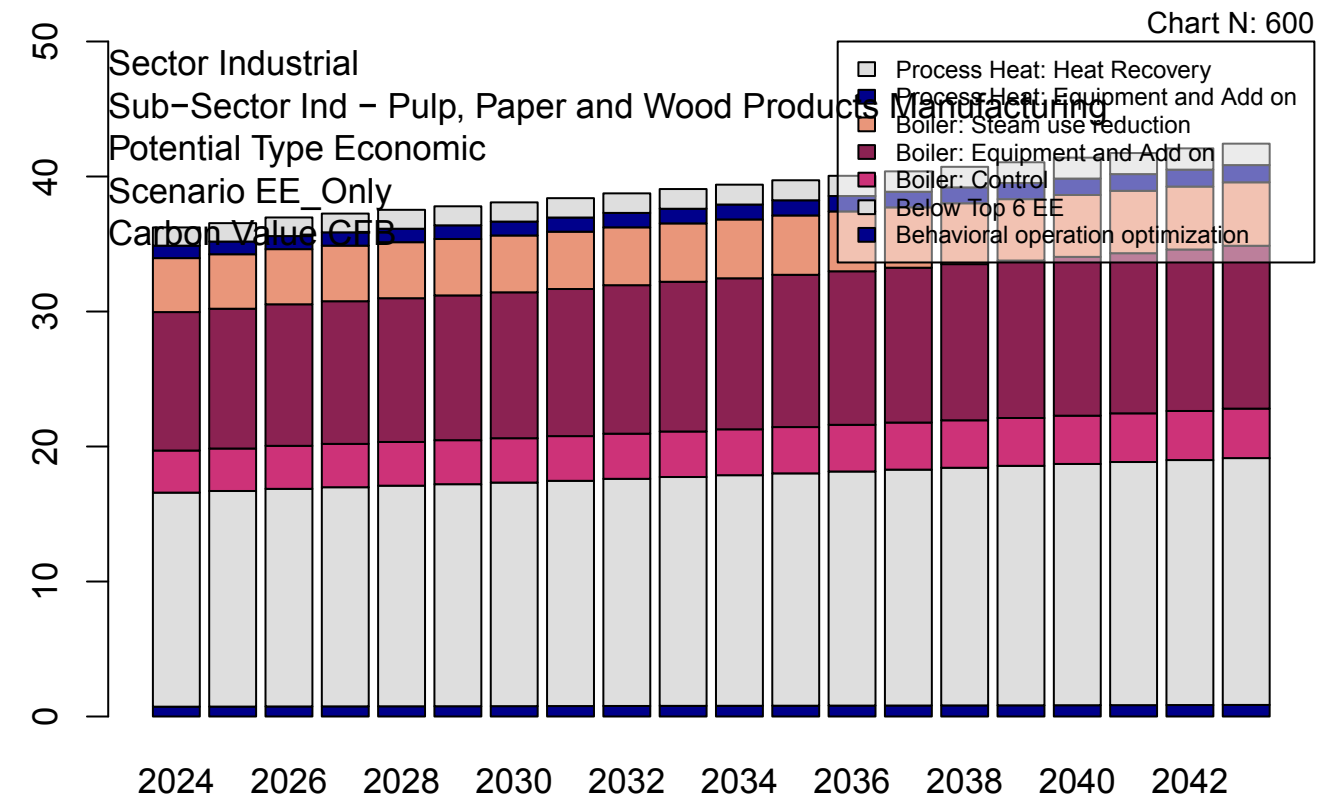
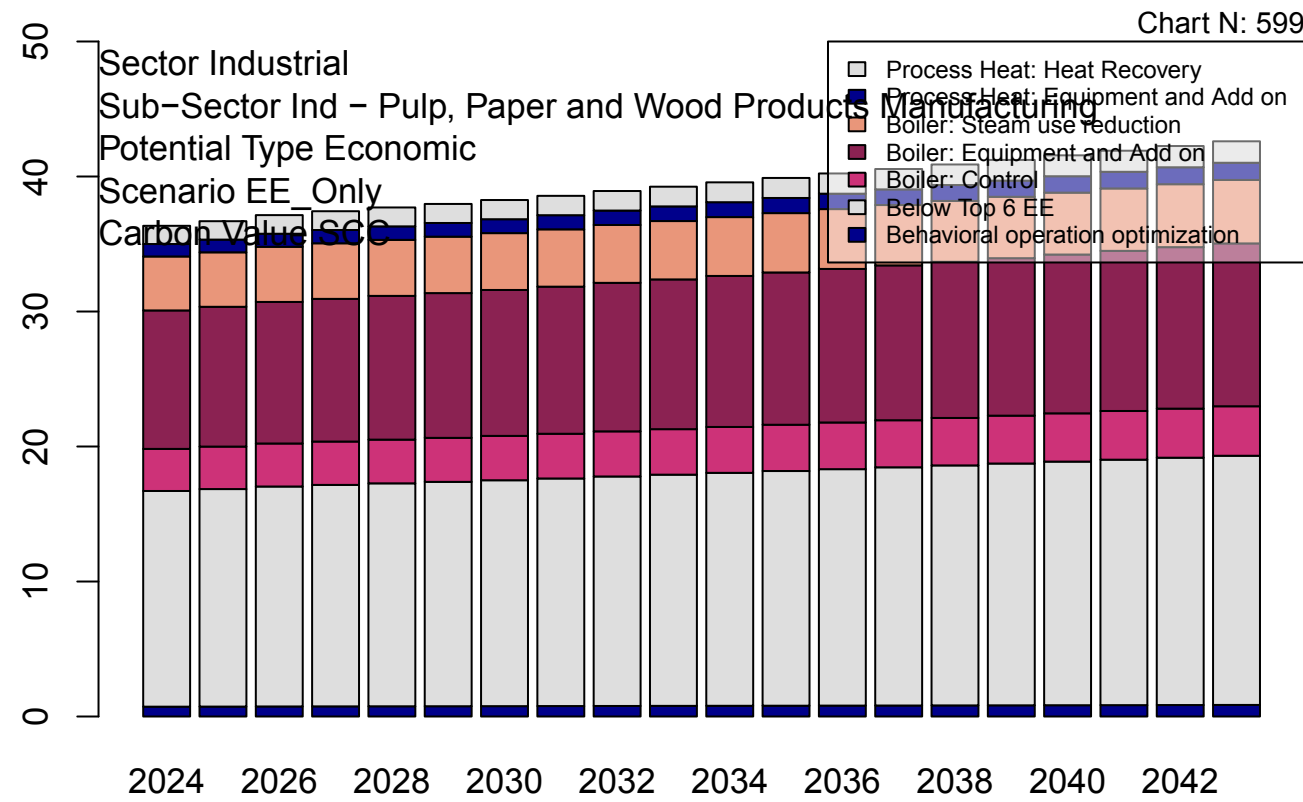
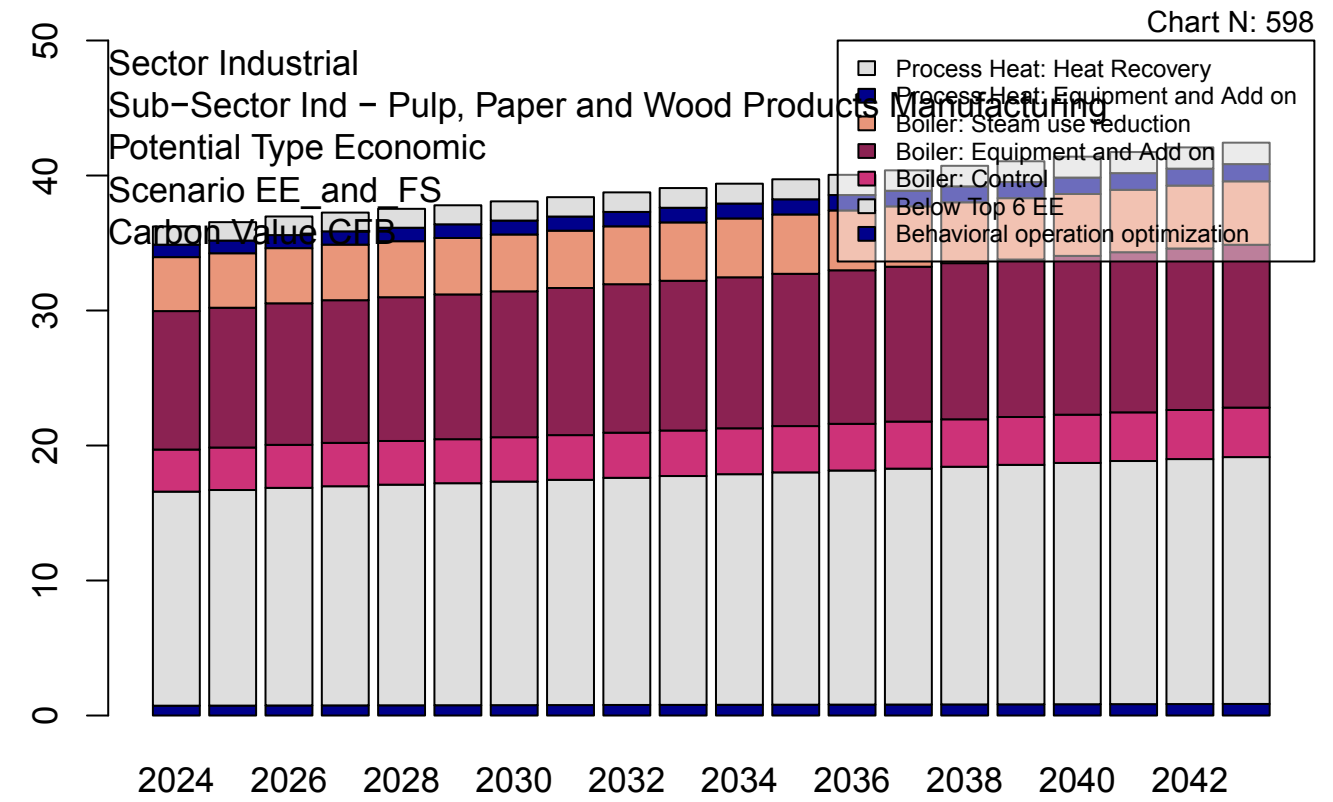
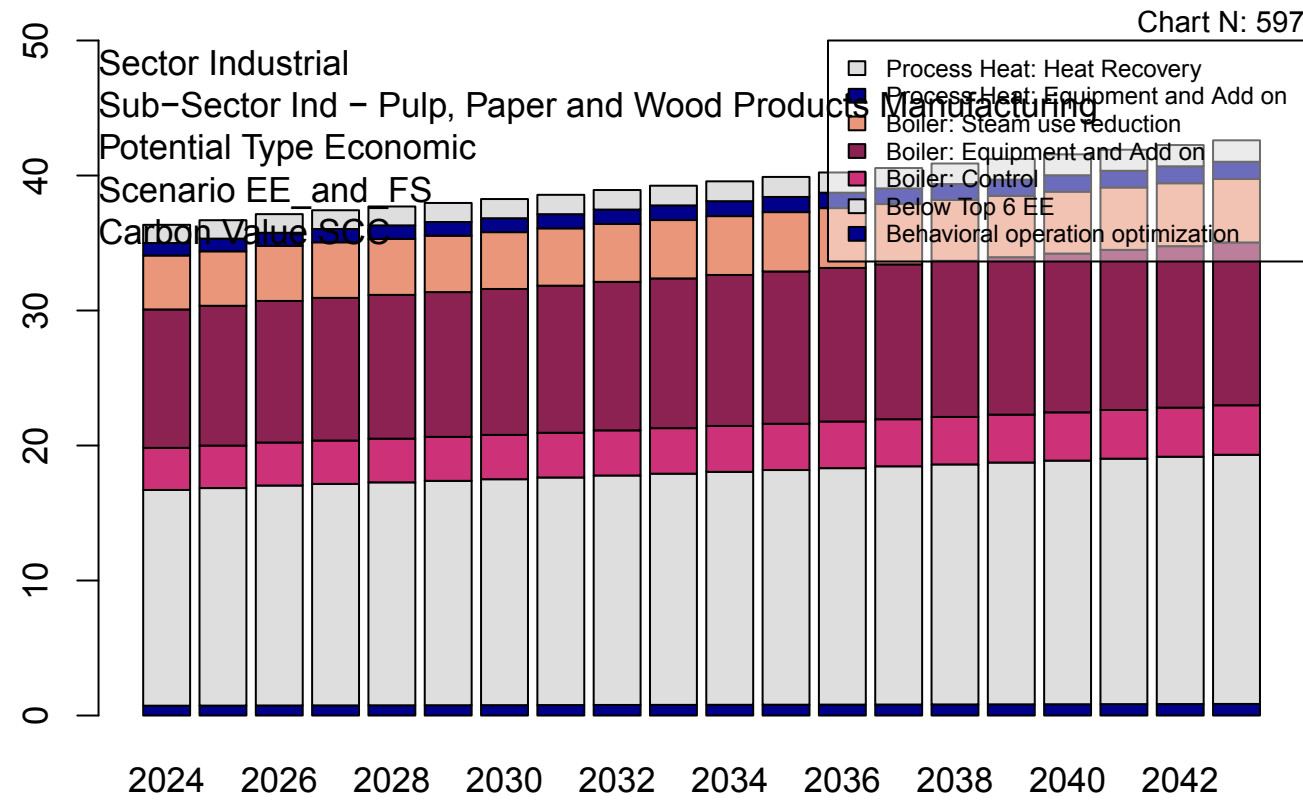
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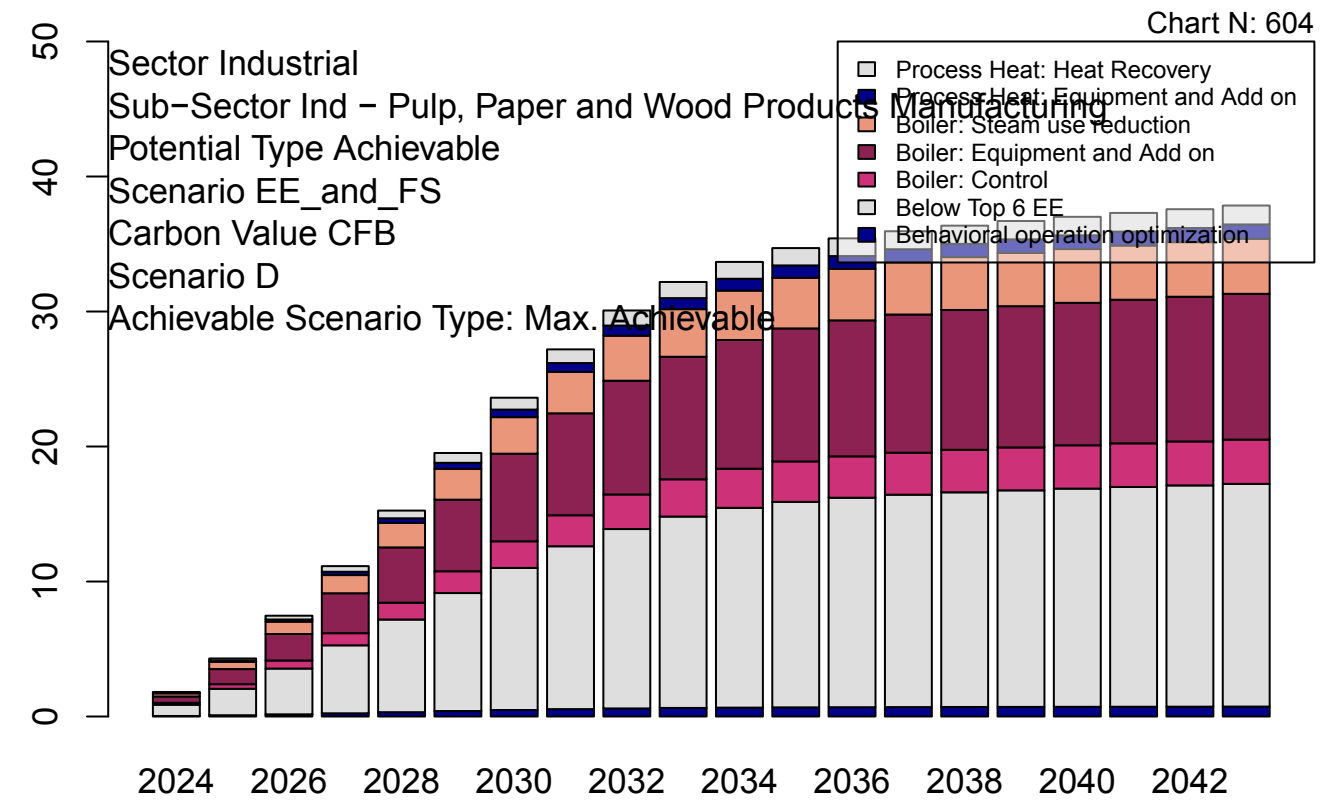
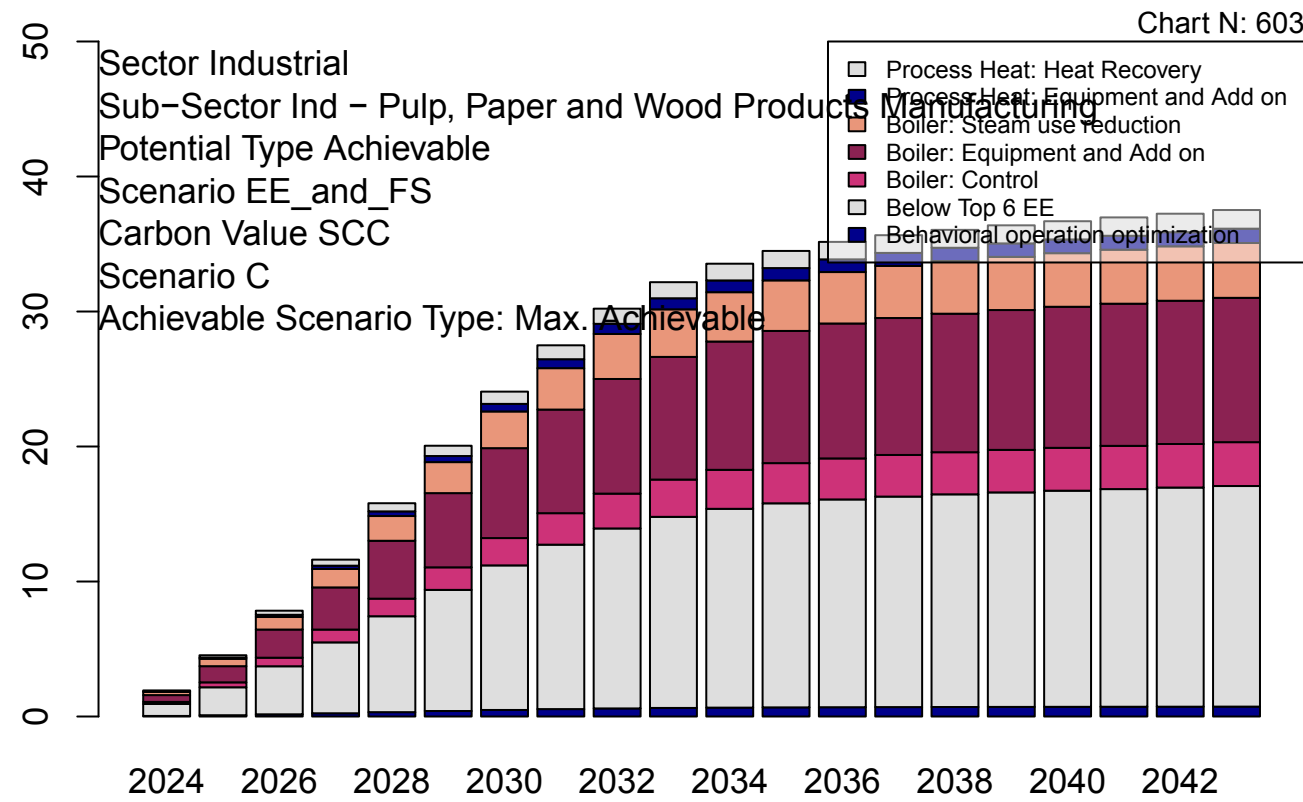
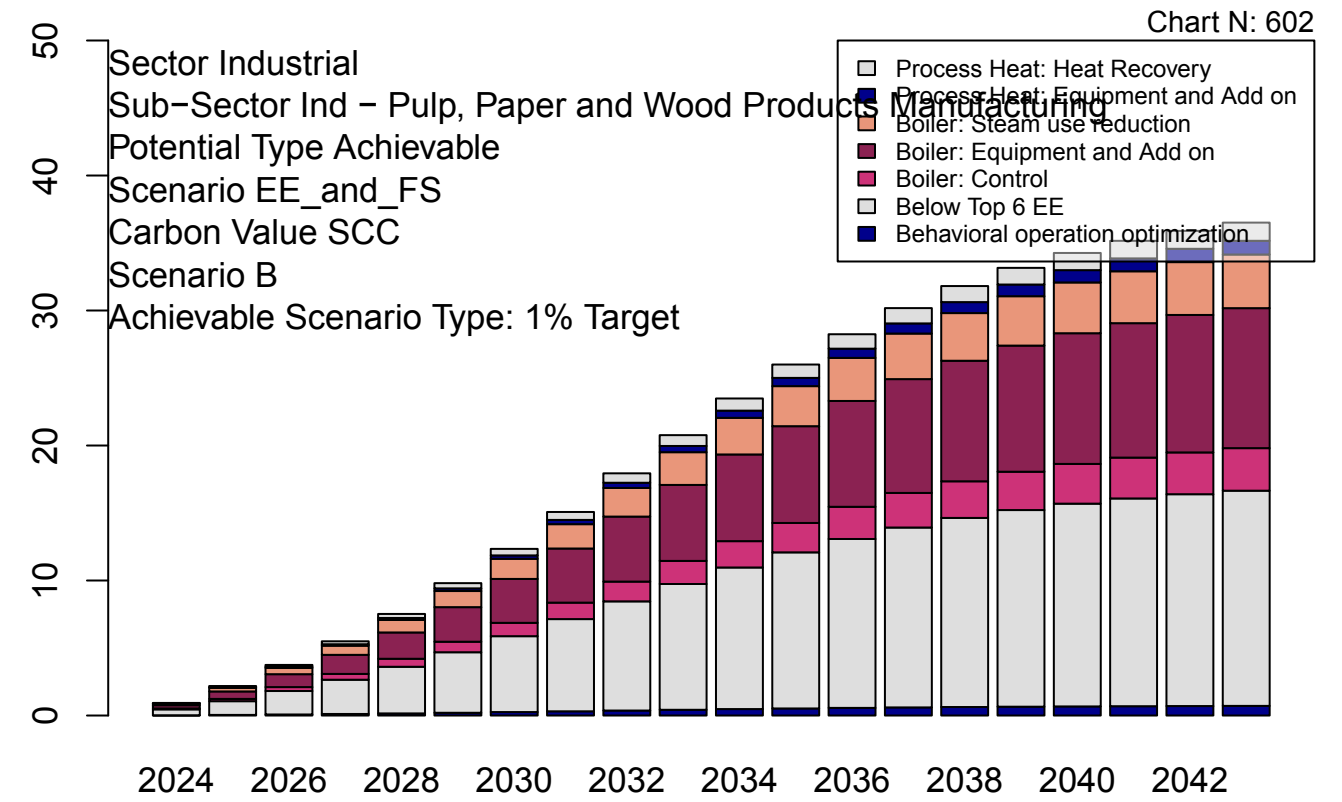
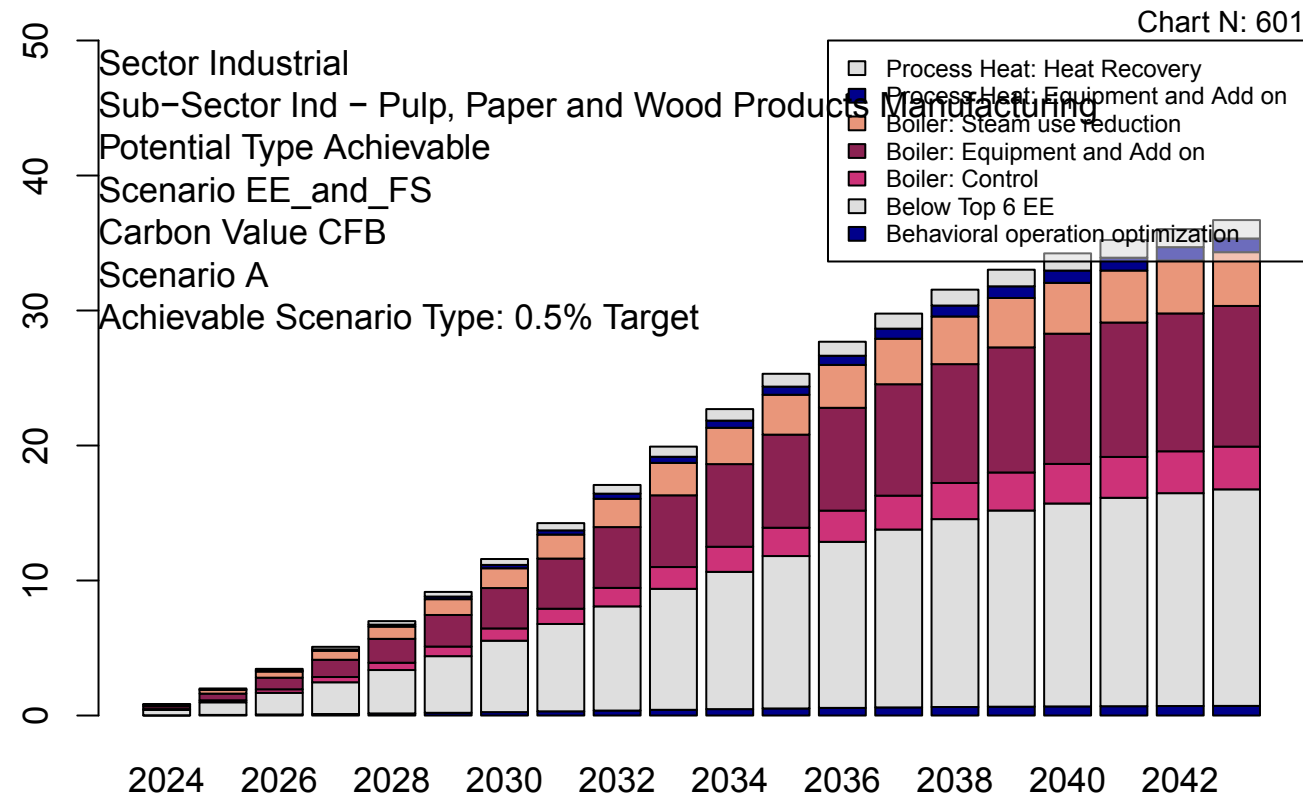


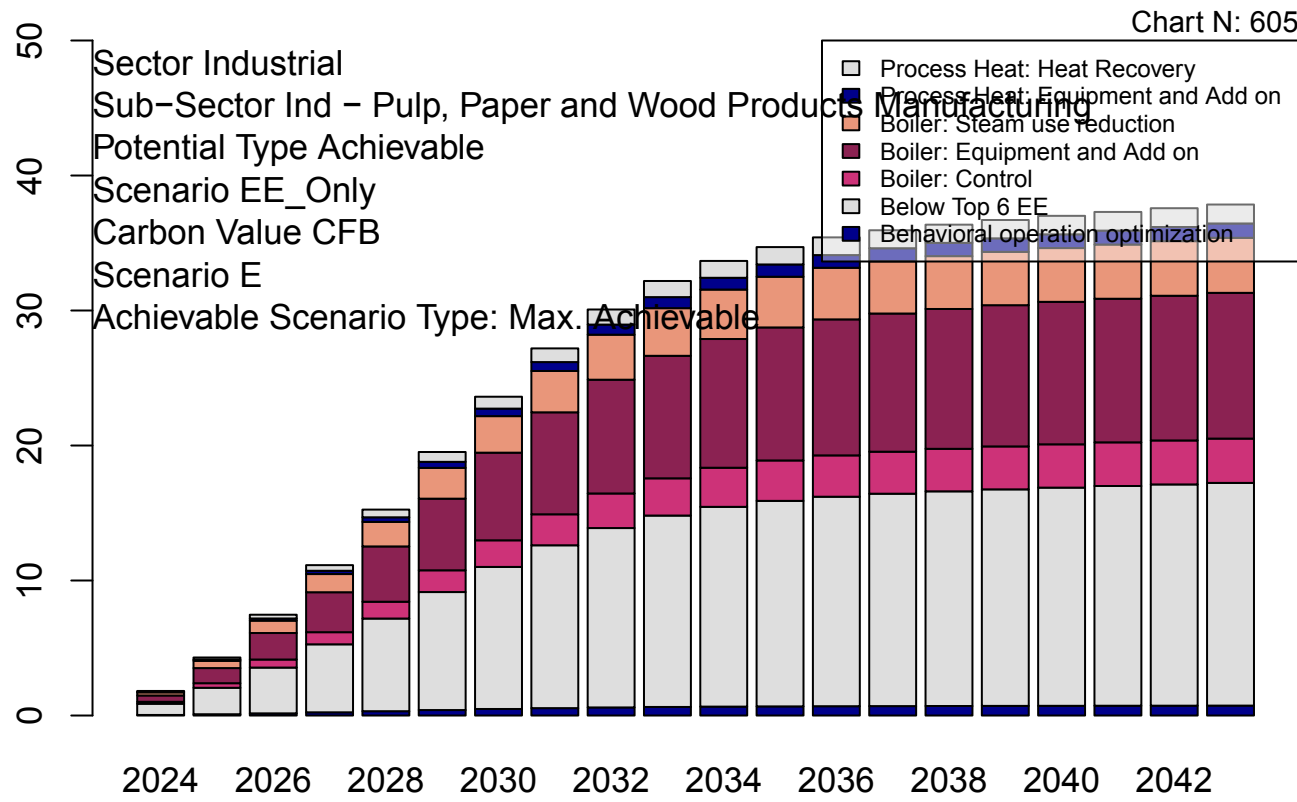
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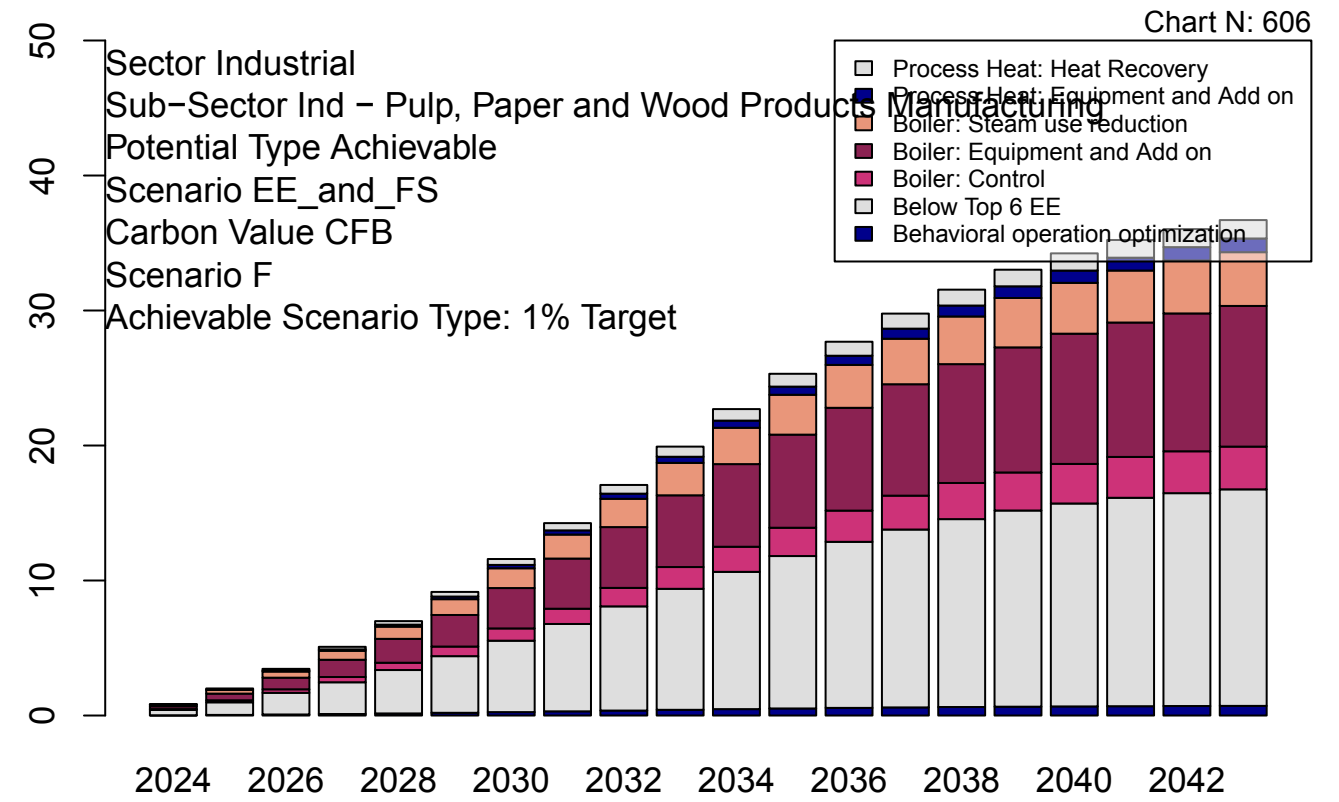
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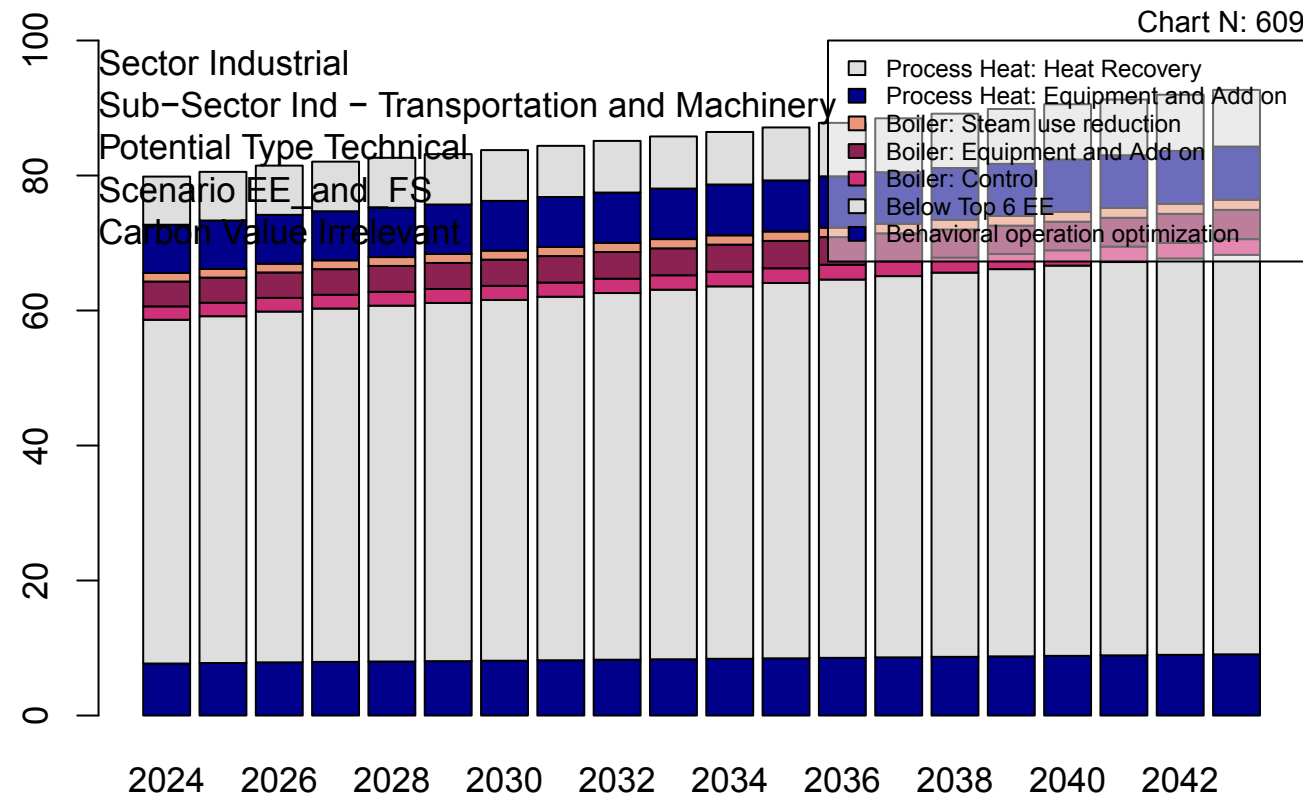




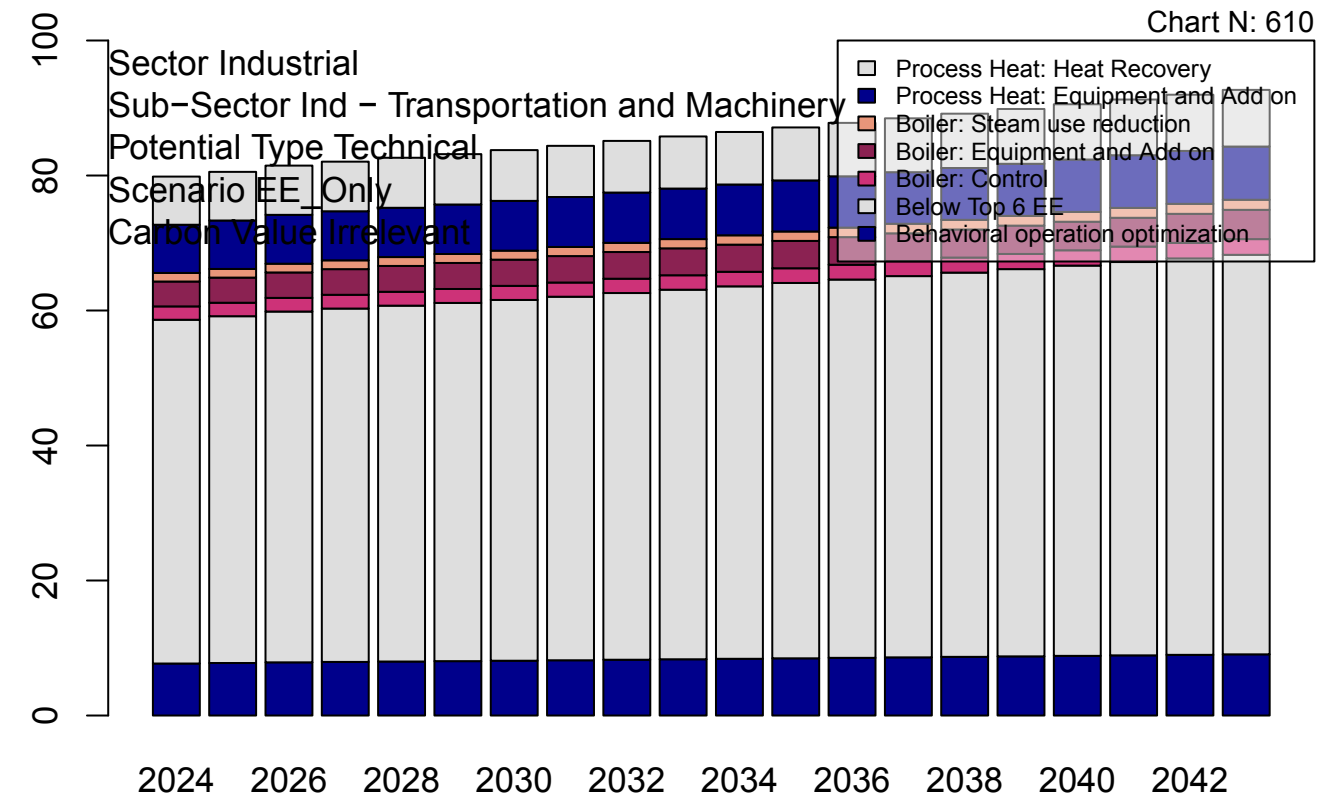
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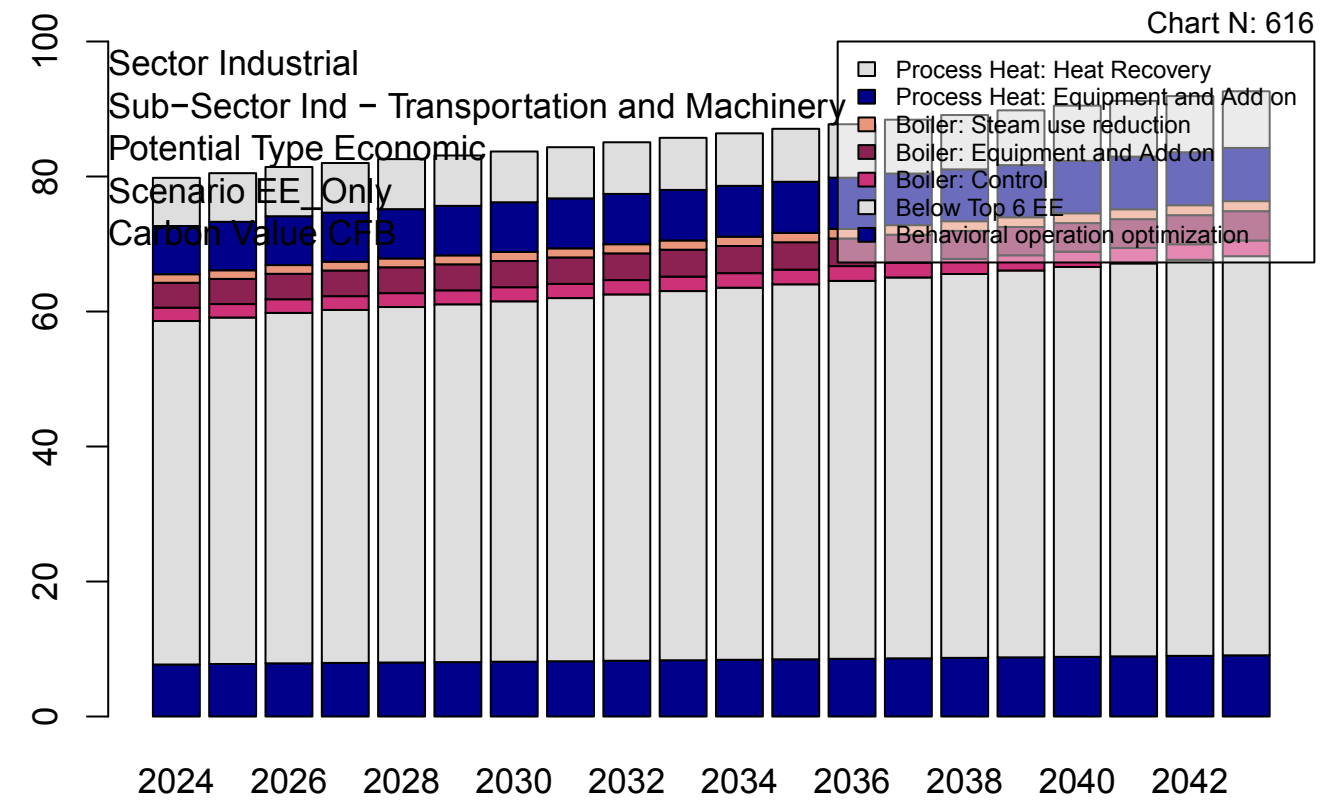
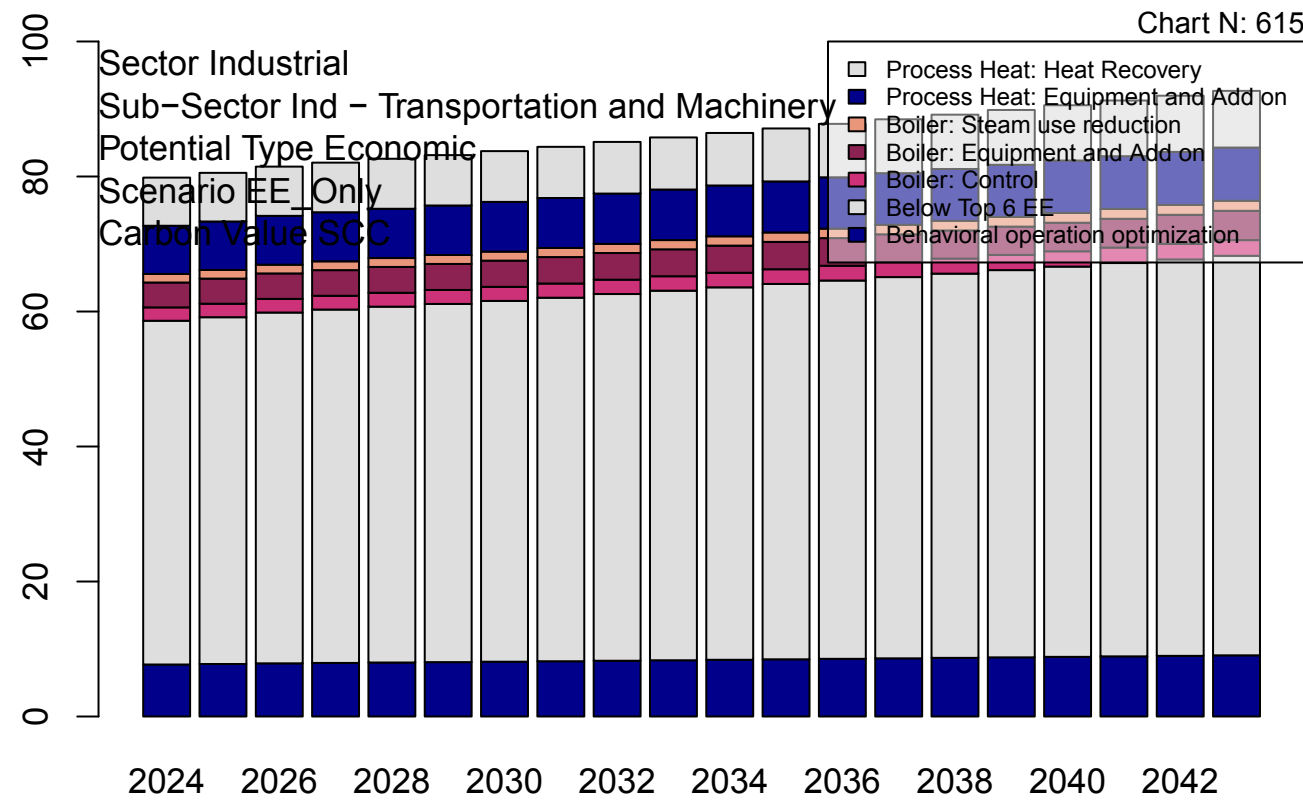
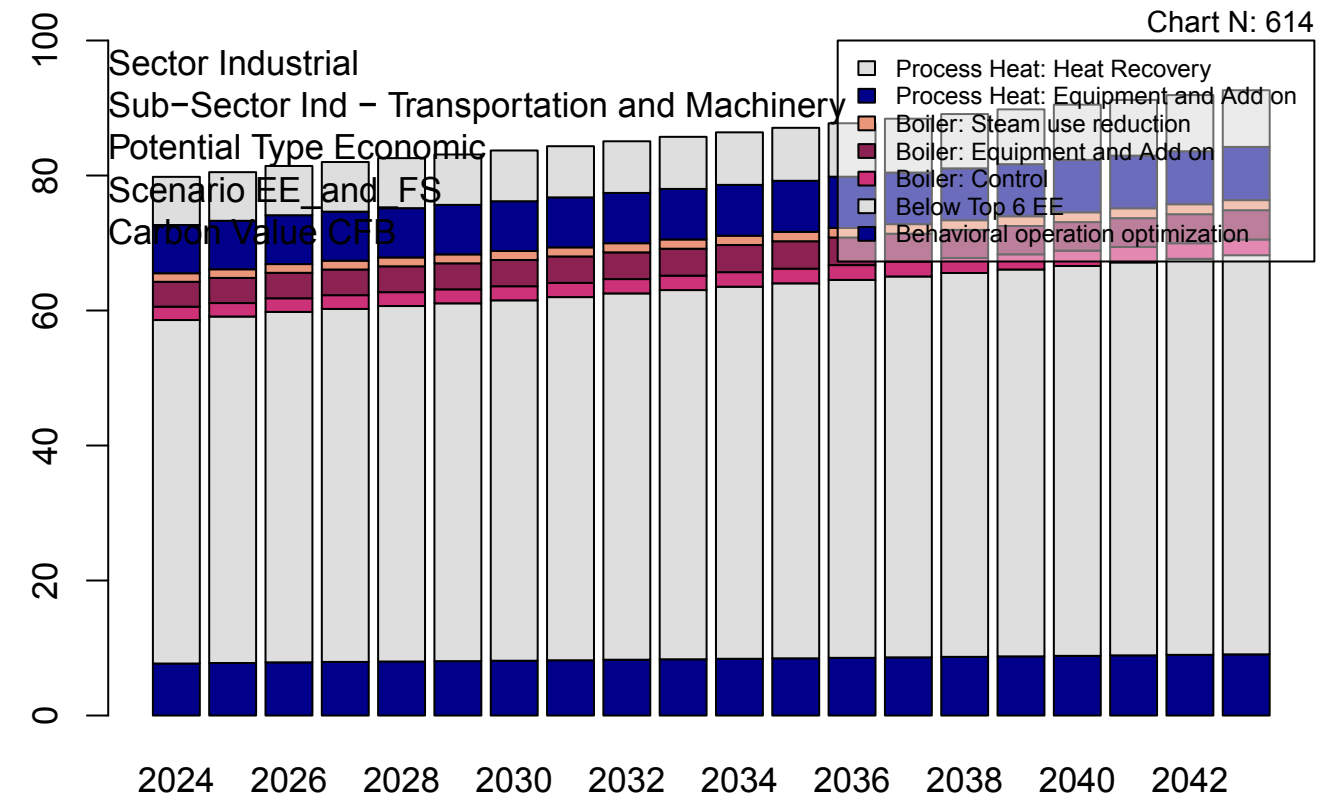
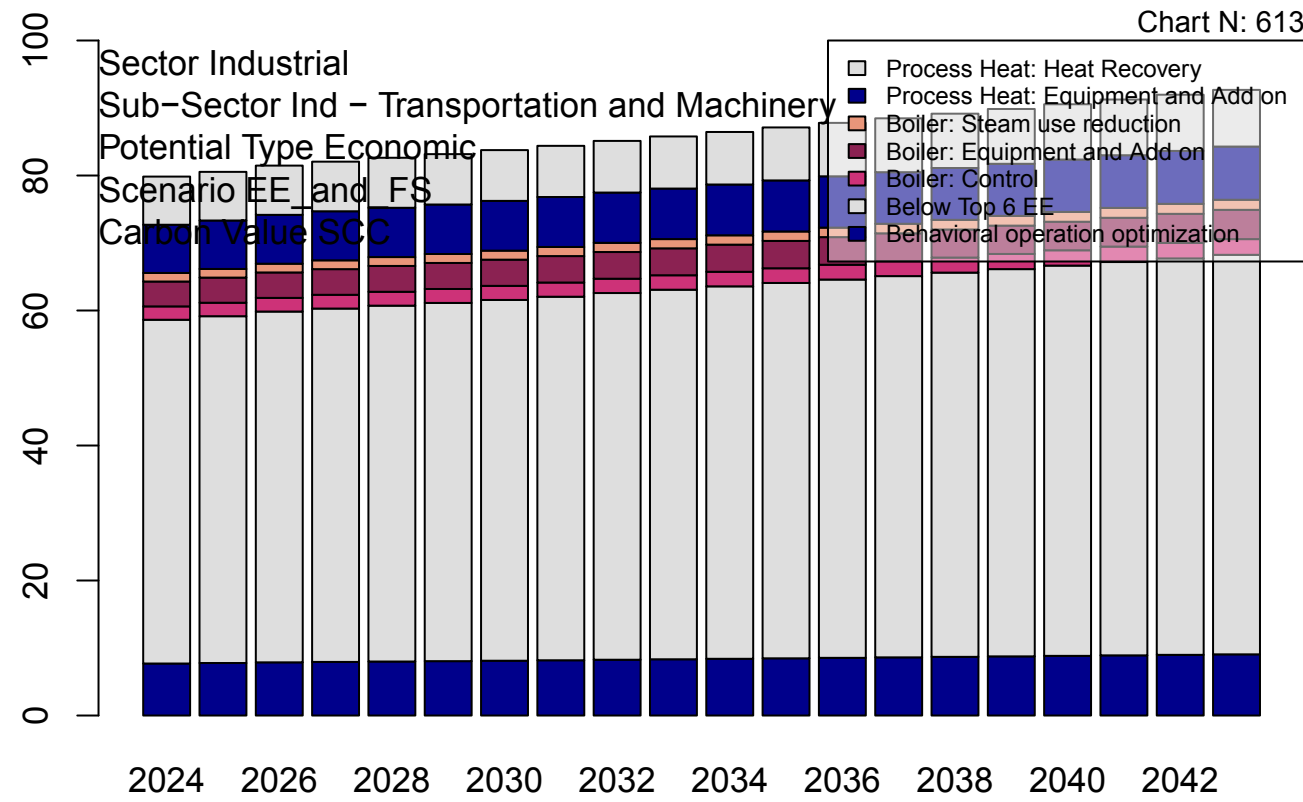
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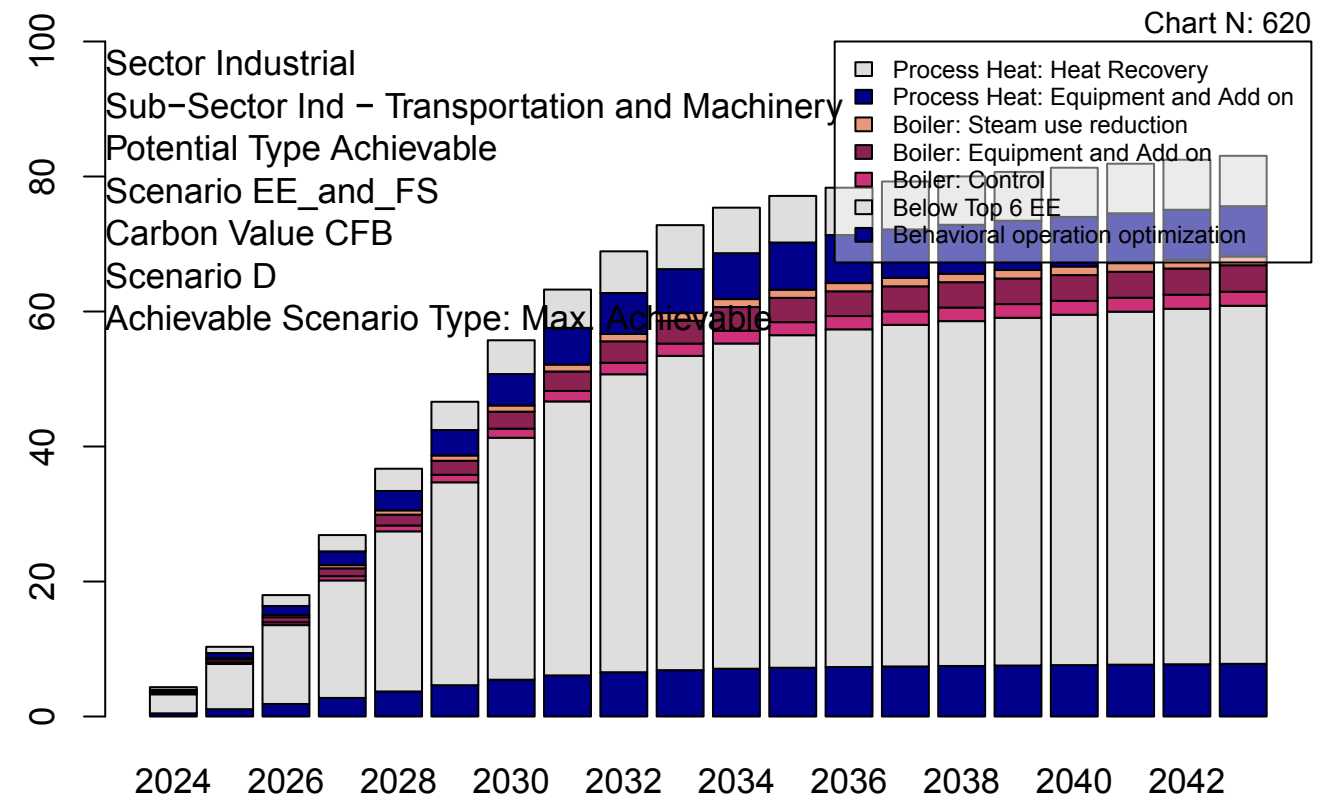
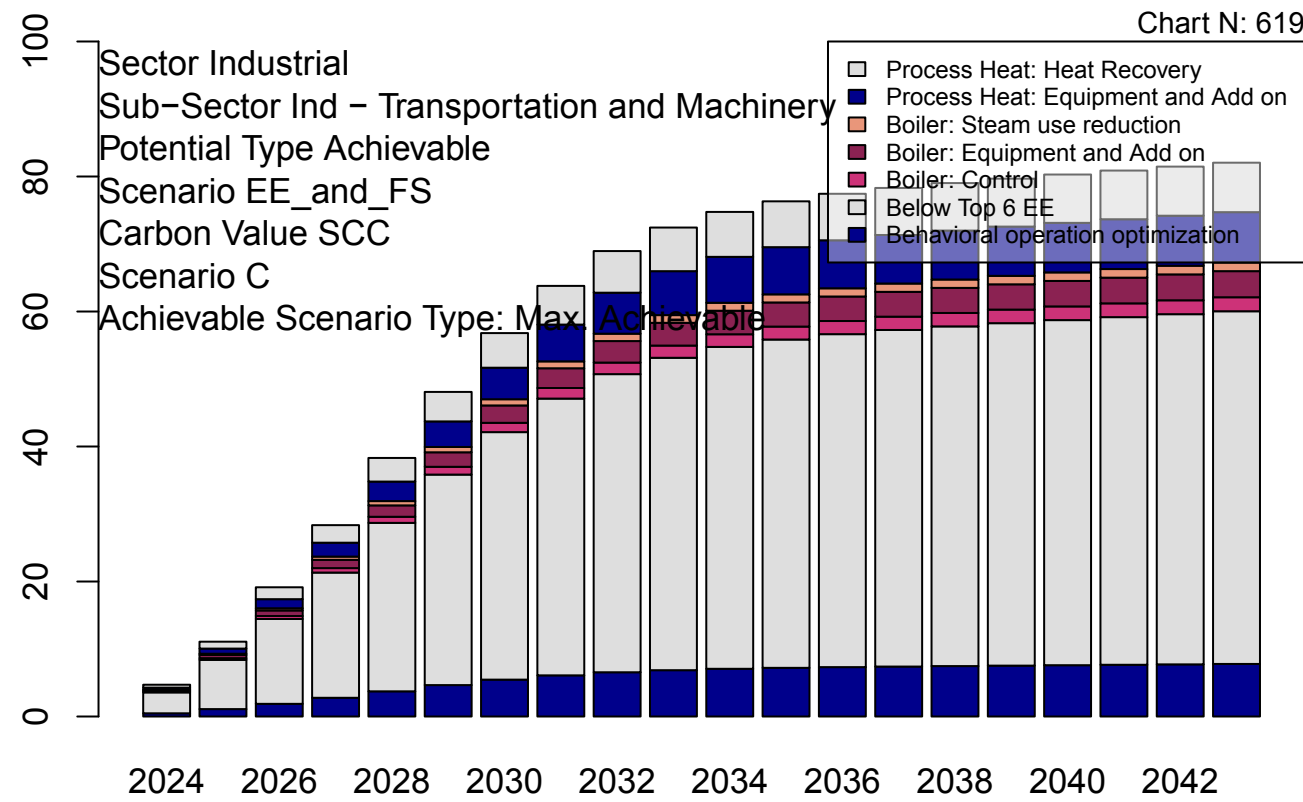
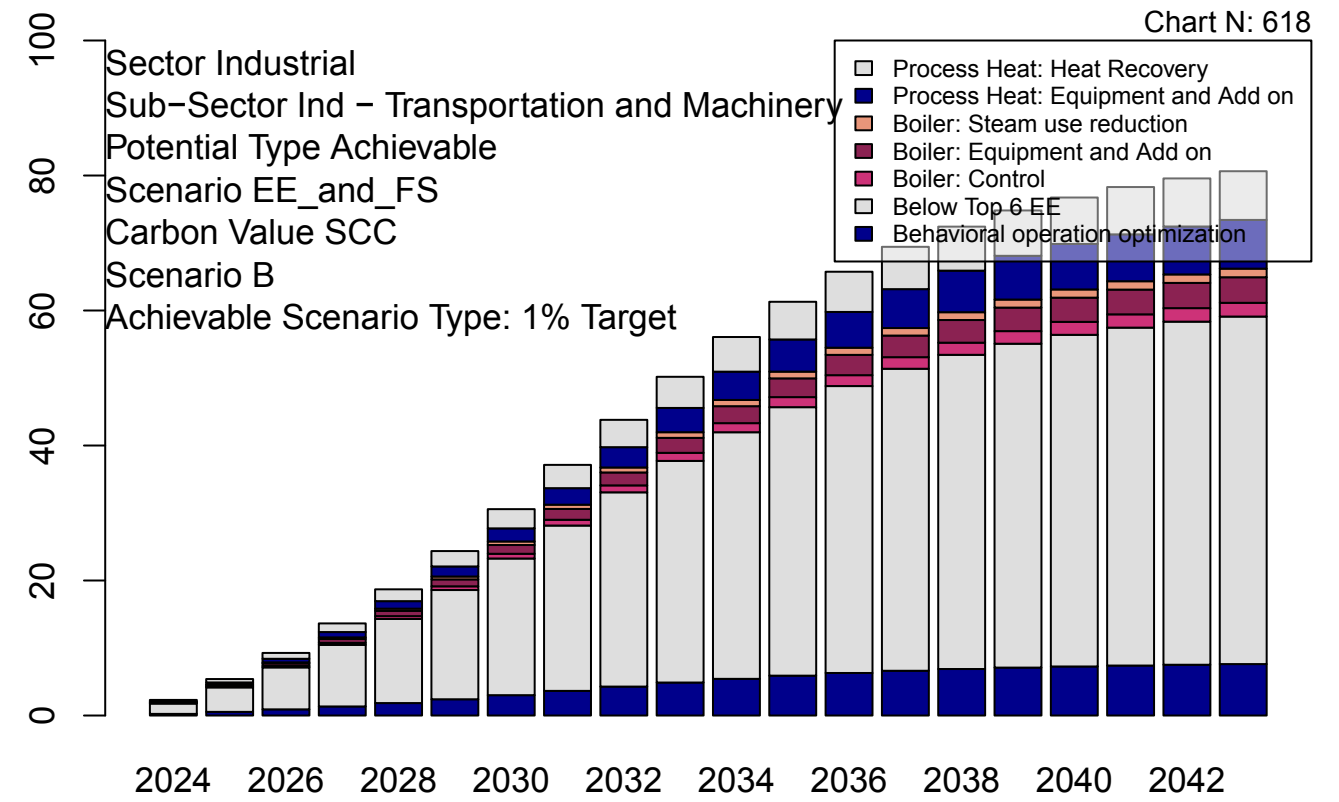
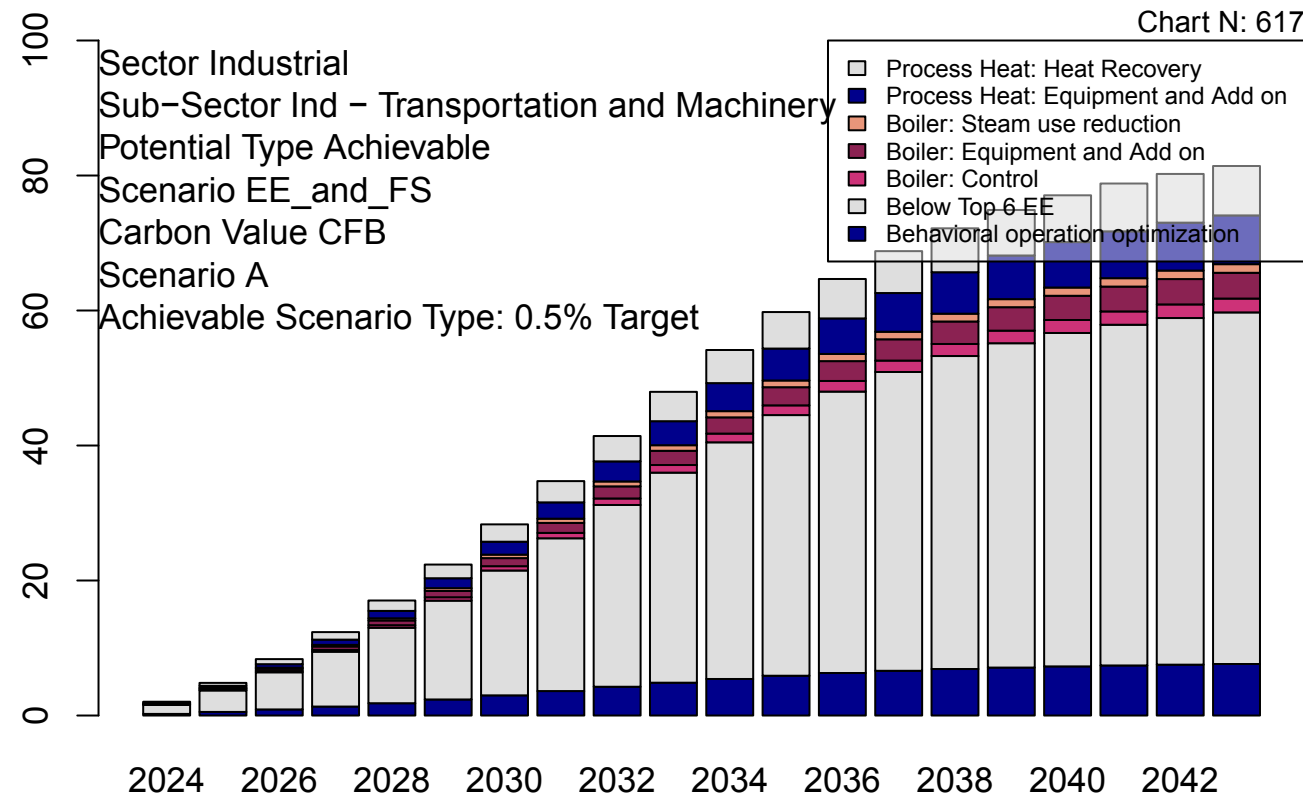


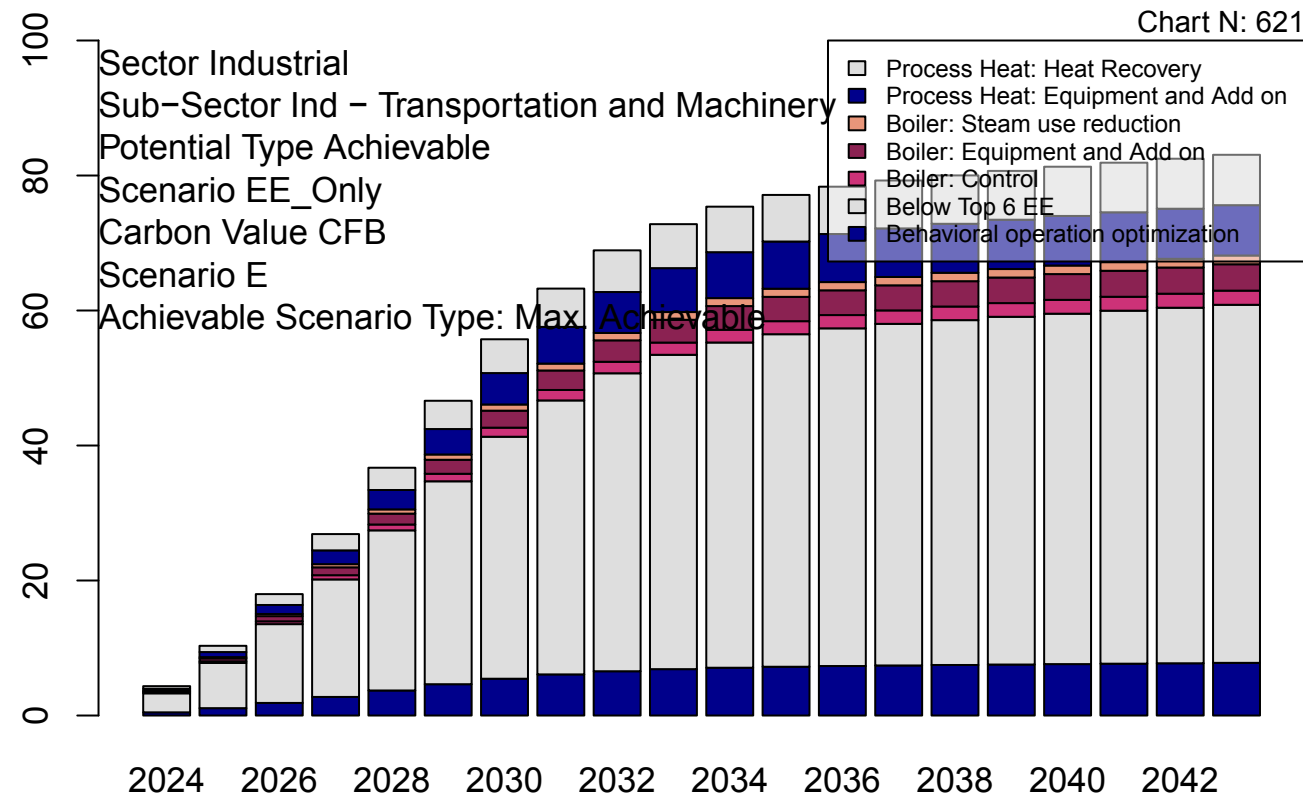
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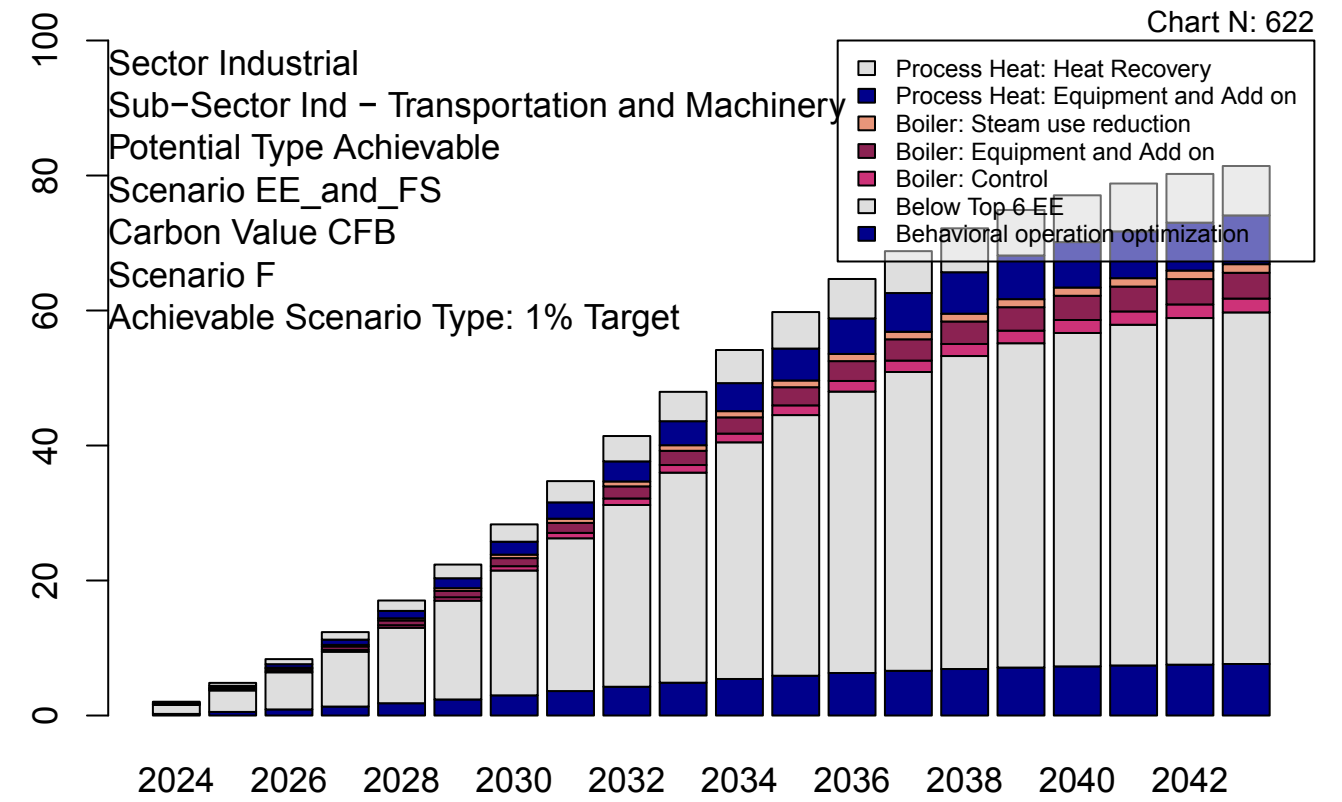
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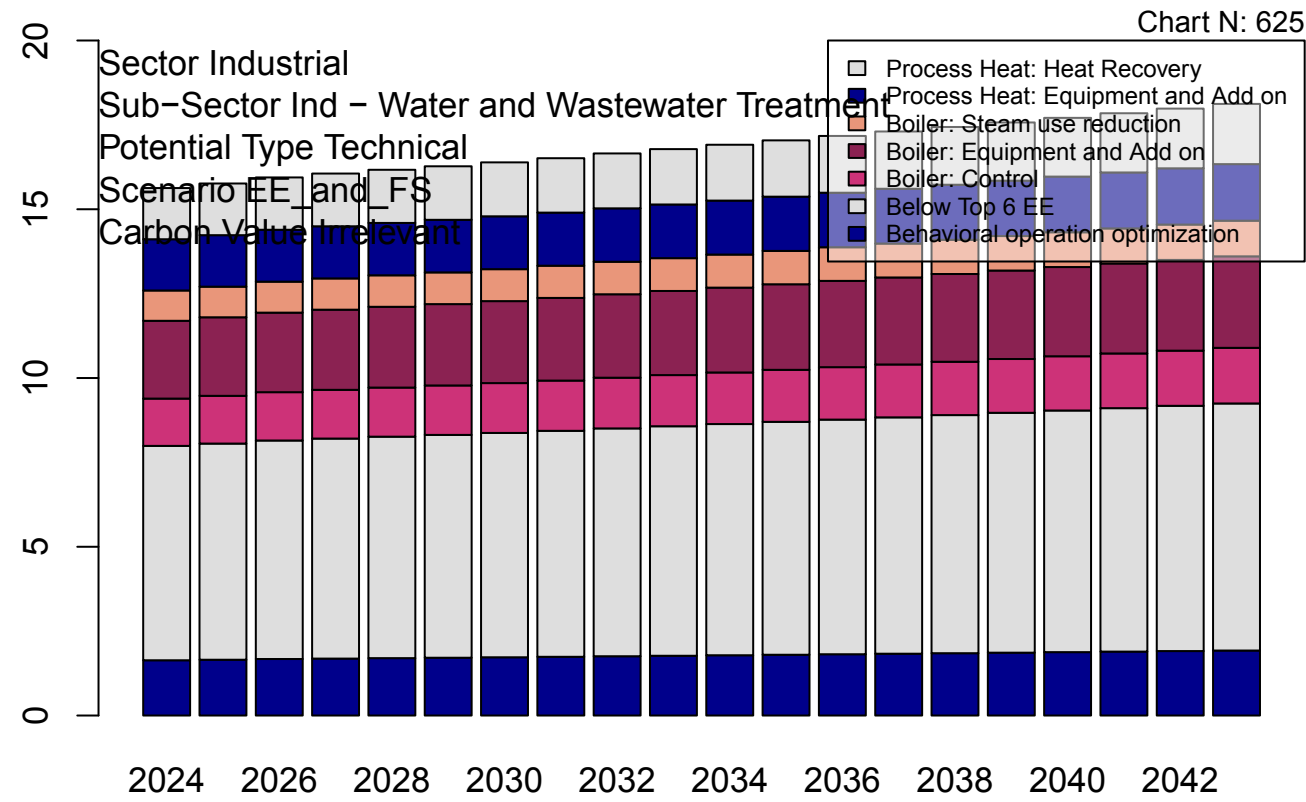




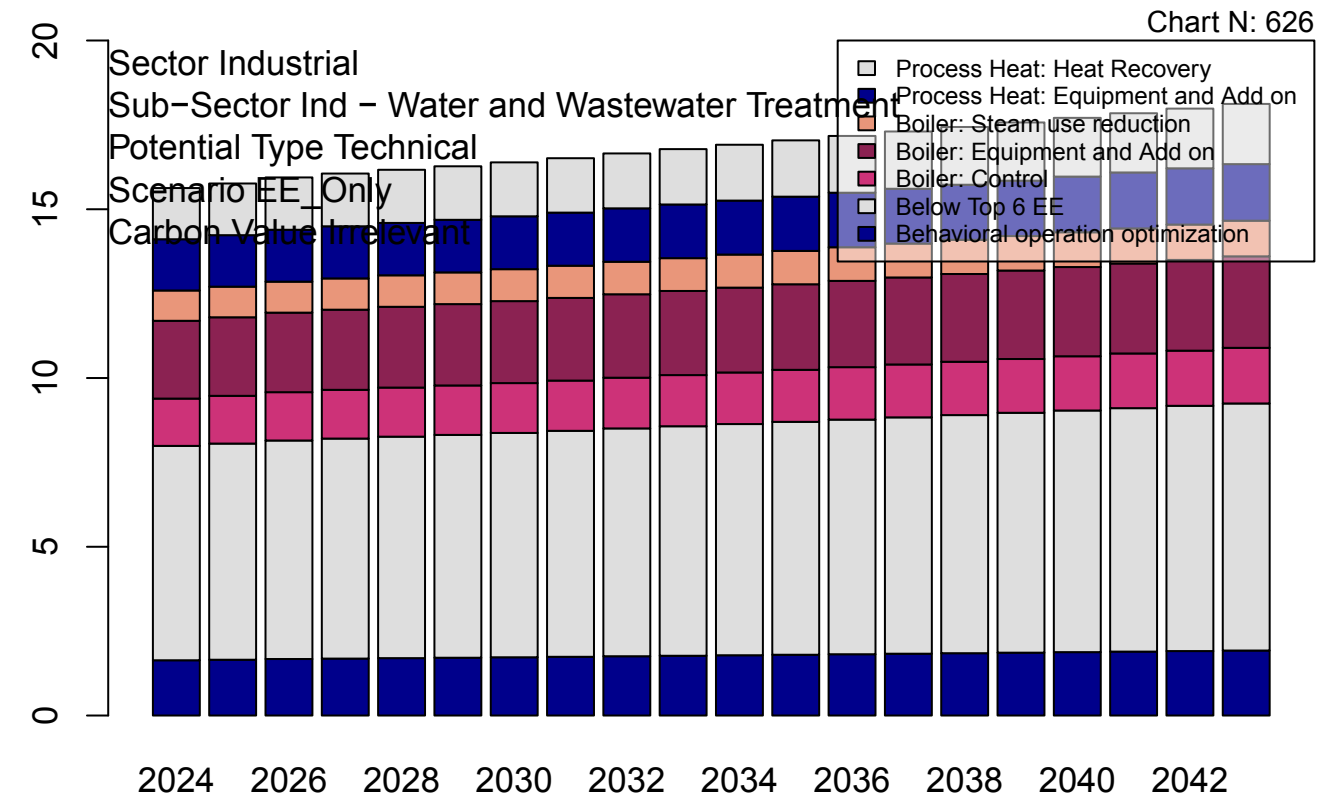
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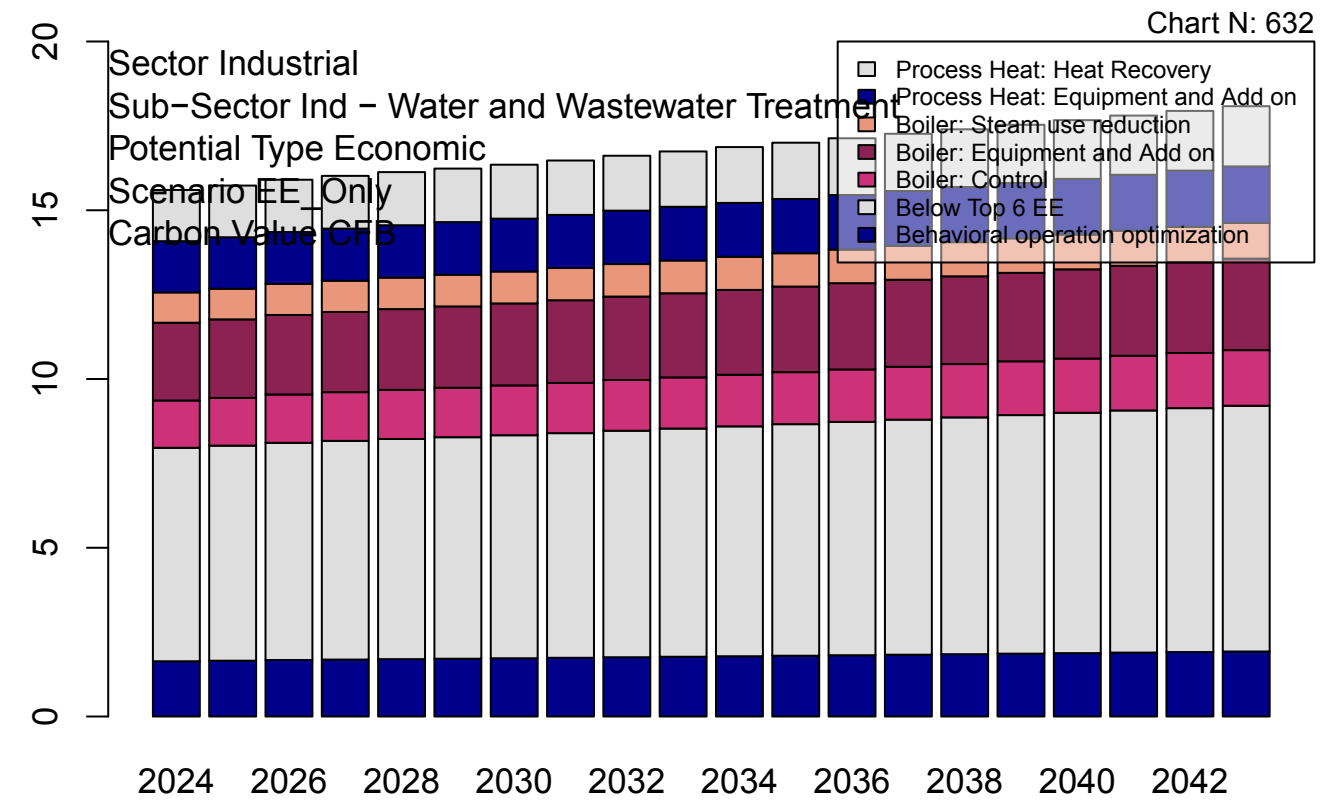
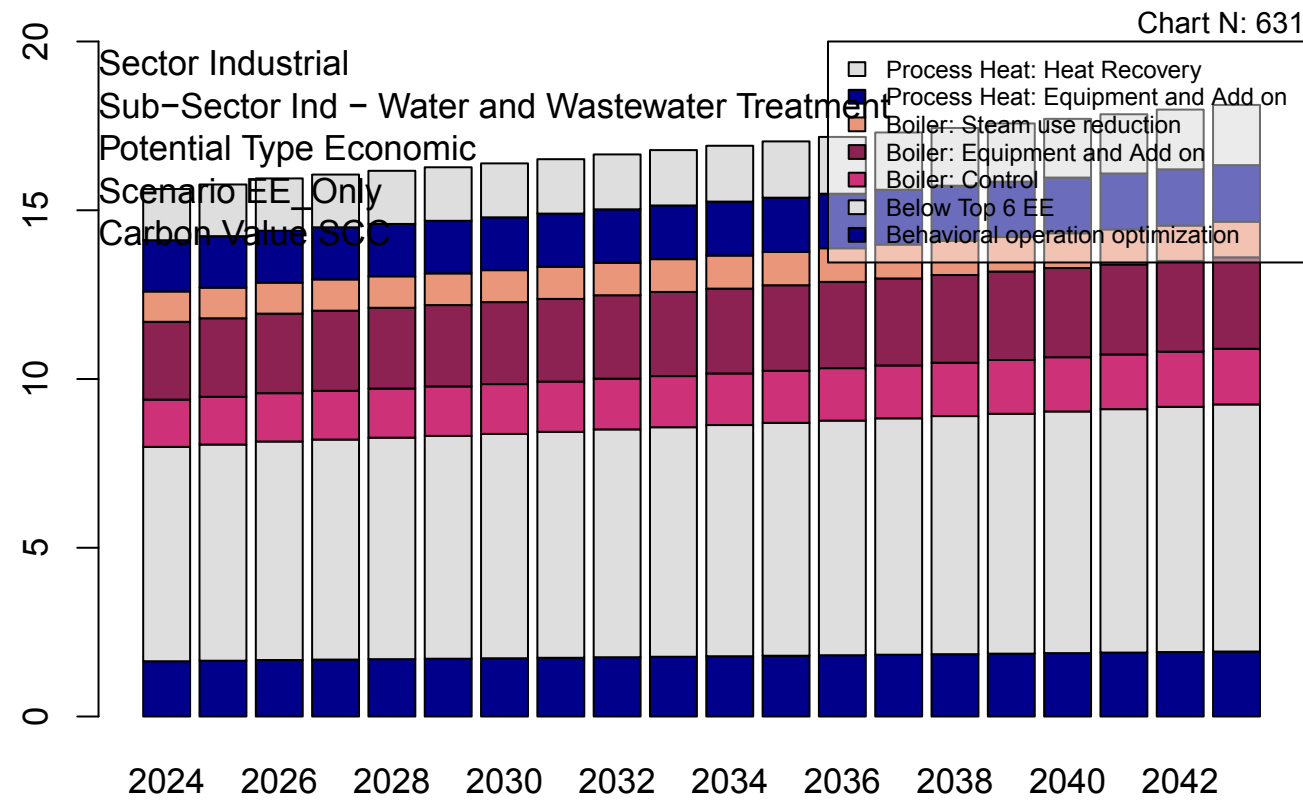
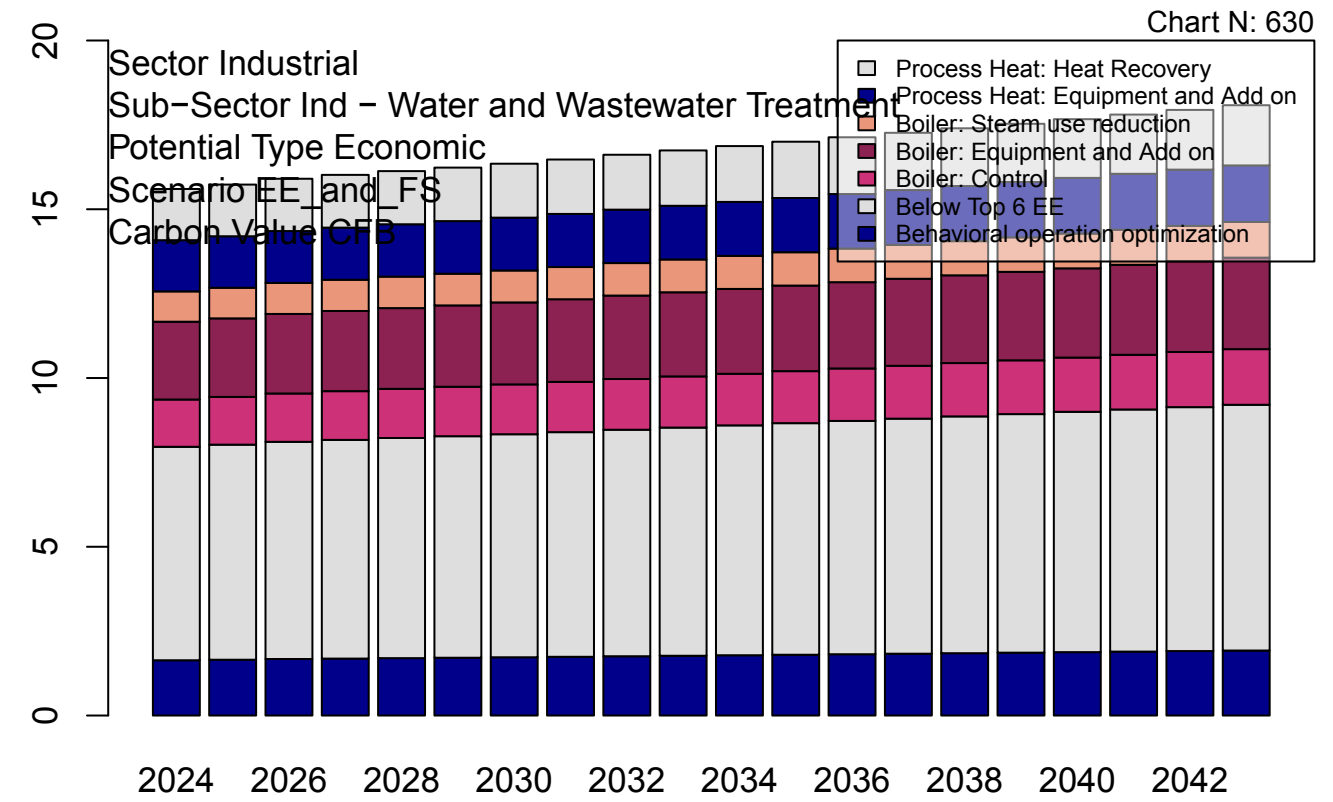
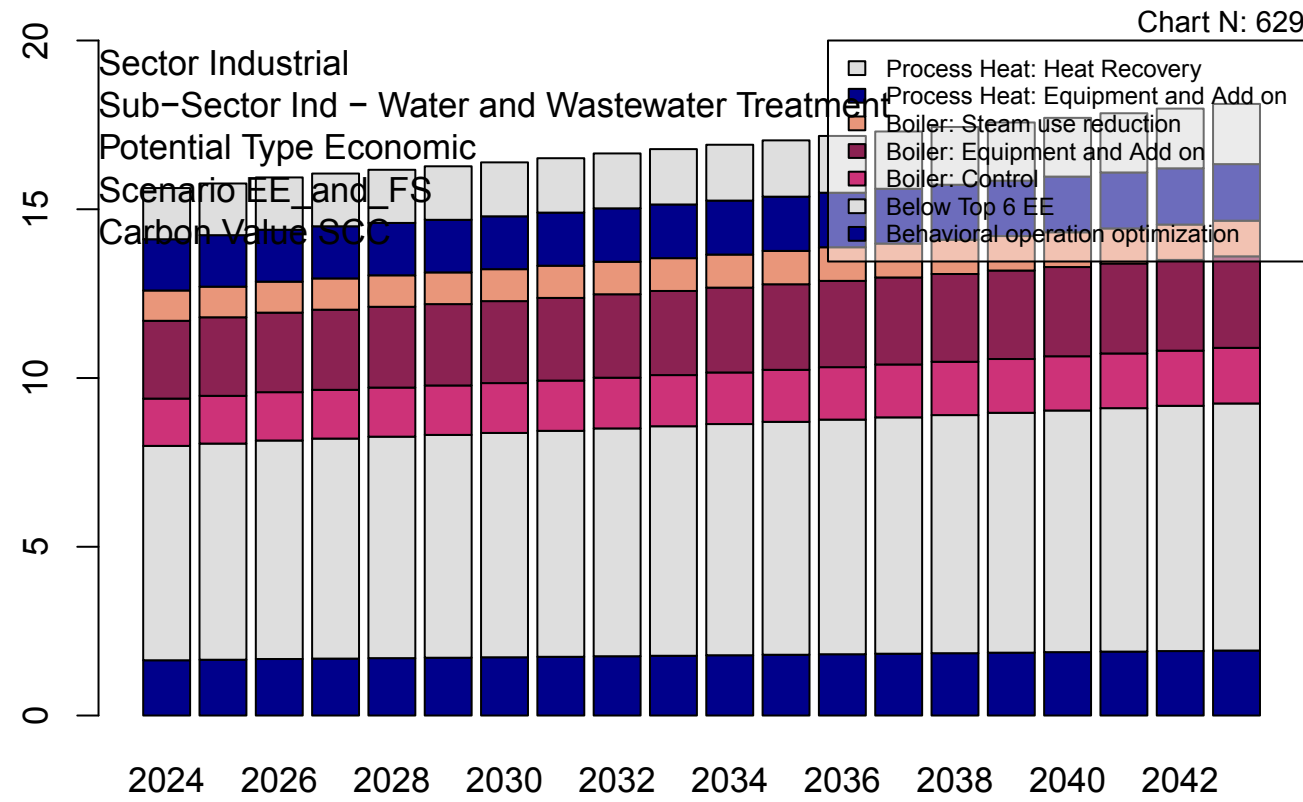
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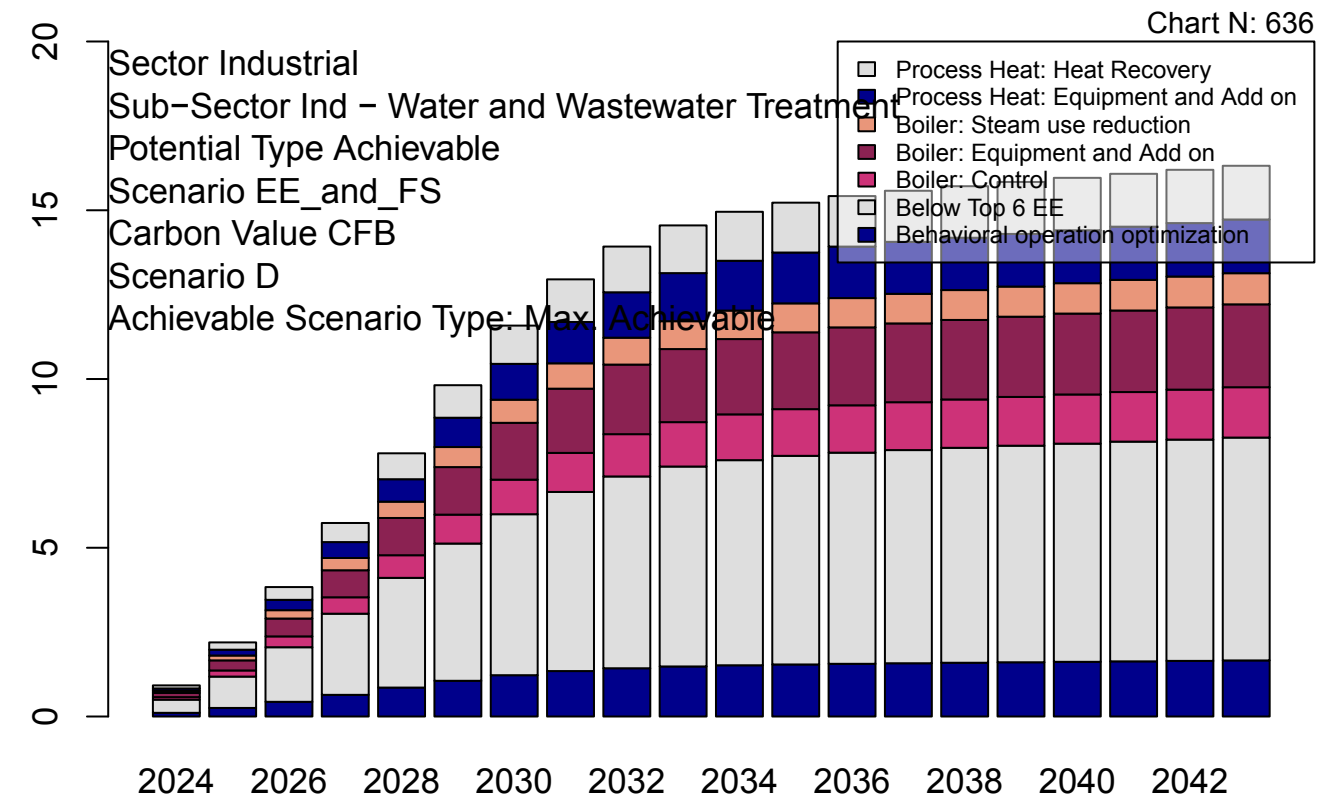
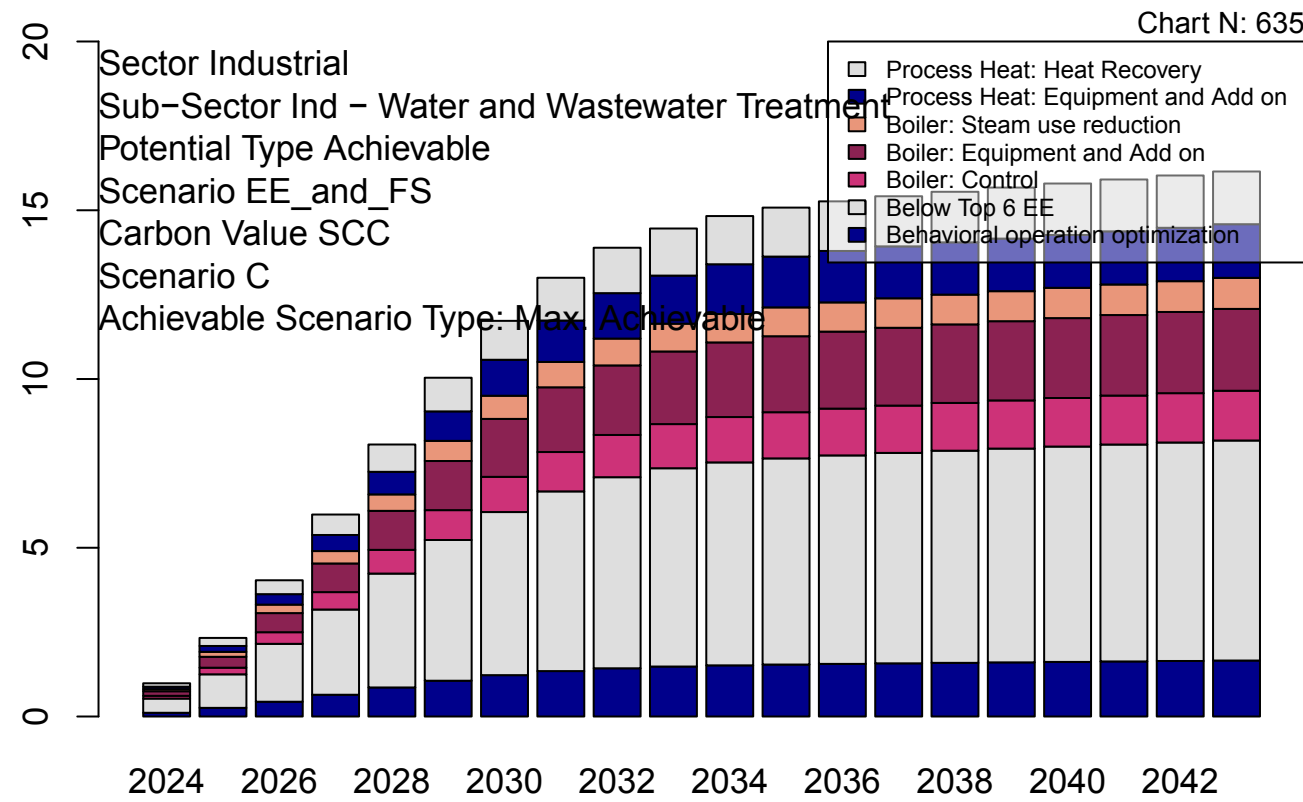
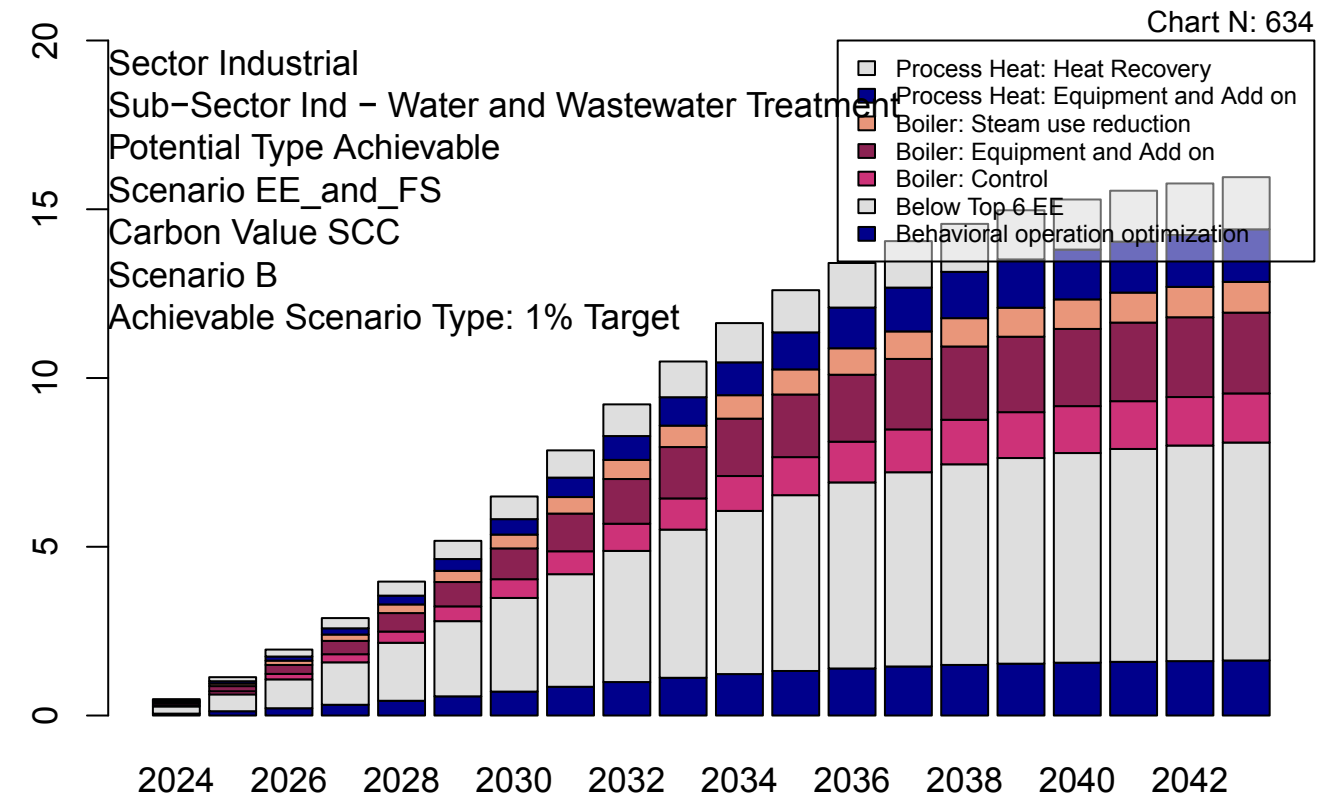
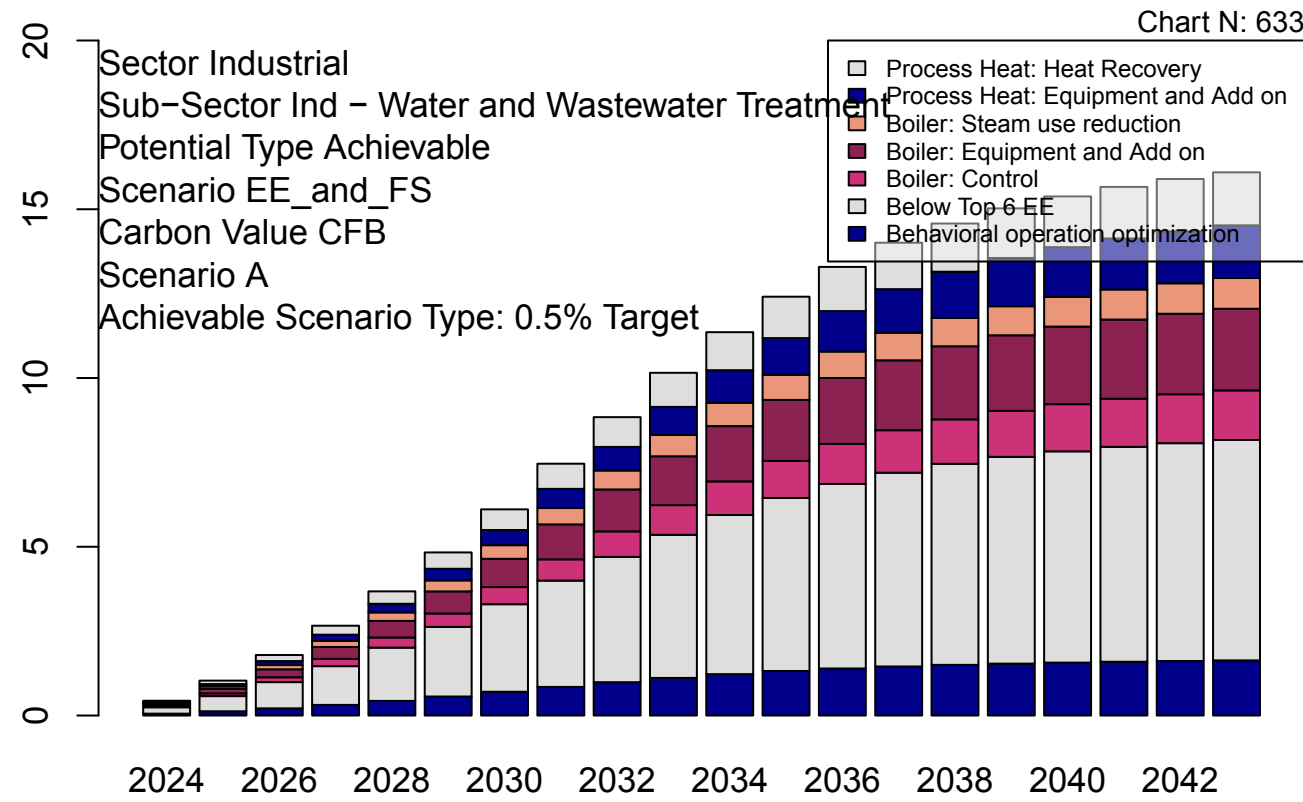


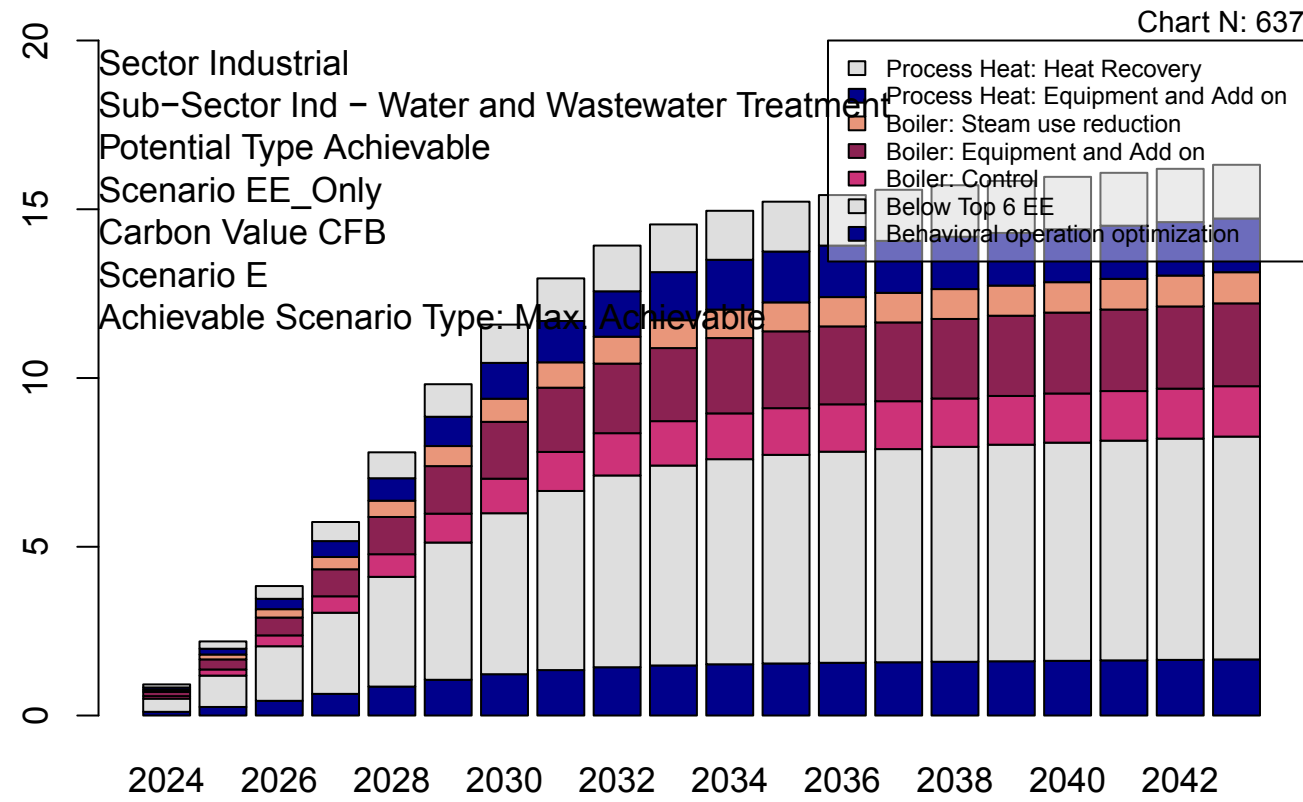
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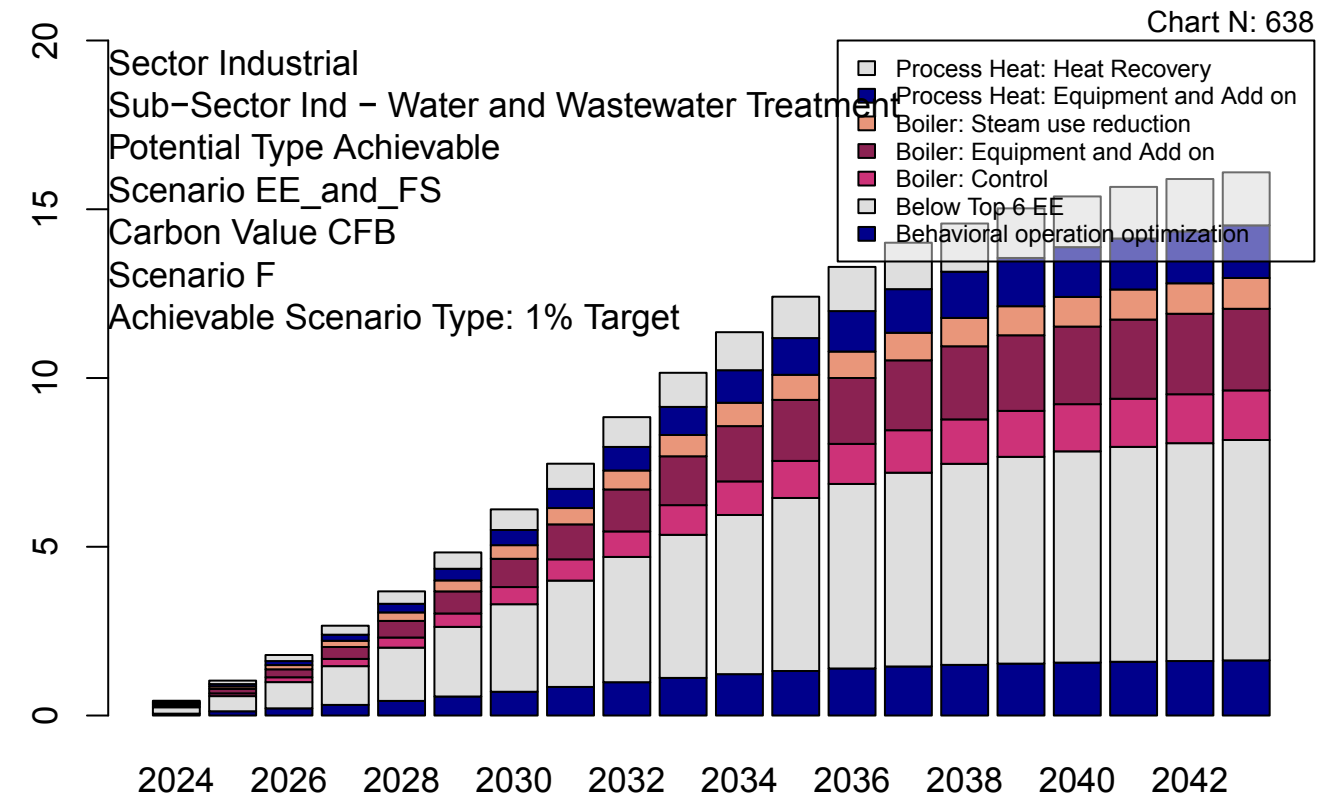
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