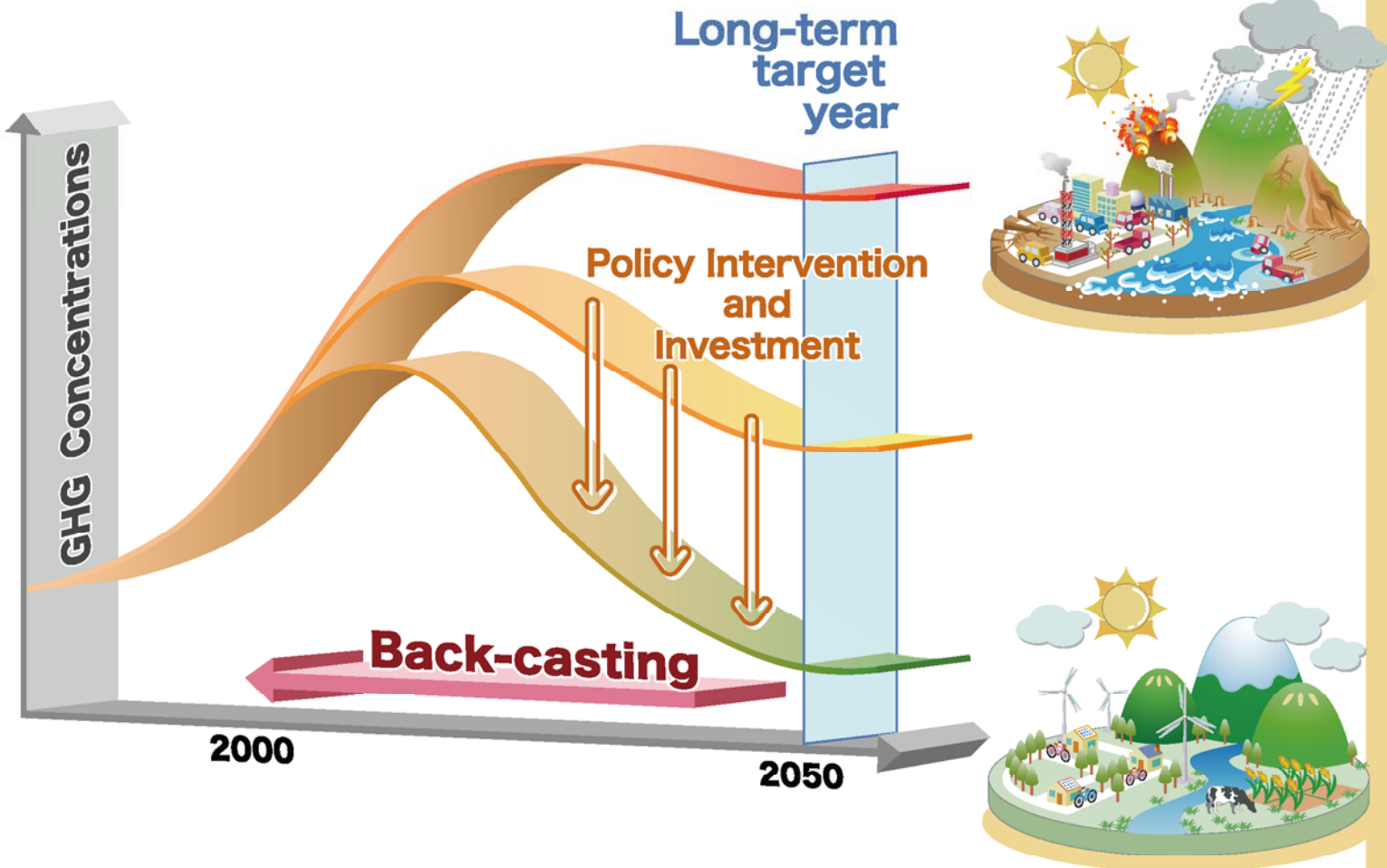




# Toward a Low Carbon Society

Developing Visions for a Low Carbon Society and Integrated Analysis of Climate Policies



## Back-casting Methodology for Designing a Low Carbon Society for Japan

By setting goals for 2050, including the required technological and social innovations (such as improvements in urban development) that need to be in place by then, we have been able to conclude that, by that time, it will be possible to achieve a high quality, low carbon society that continues to meet required service demands while still achieving a 70% reduction in carbon dioxide emission levels compared to 1990.

It is possible to reach a 70% reduction in CO<sub>2</sub> emissions by reducing energy demand by 40 to 45% and introducing low-carbon energy on the supply side. On the demand side, large reductions in energy consumption are possible through improvements in energy efficiency, declines in energy demand due to decreases in population, and a more rational use of the energy.

What happens after the first commitment period of Kyoto Protocol is currently a focal point of international debate. Through our research, we found that a wide variety of proposals have begun to emerge, especially after the Kyoto Protocol entered into force in 2005, in response to real-world conditions.

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