# Climate Change Needs Behavior Change

A new report from [Rare's Center for Behavior & the Environment](#) quantifies the contribution individual behavior change can make toward curbing greenhouse gas emissions. The Center's analysis of 80 climate solutions outlined in Project Drawdown, a comprehensive plan to mitigate global warming, found that individual behavior plays a significant role in 30 of them. Further analysis of those 30 solutions, which fall across four economic sectors, and are based on the emissions reduction potential estimates in Drawdown, found that greater adoption could help reduce about one-third of the projected global emissions between 2020 to 2050. The report also offers practitioners behavioral science tools to promote the adoption of the solutions.

THE FOUR ECONOMIC SECTORS OF SOLUTIONS

The emissions reduction potential of the 30 identified solutions add up to about one-third of projected cumulative greenhouse gas emissions between 2020-2050.

36.8%

Food

Agriculture & Land Management

Transportation

Energy & Materials
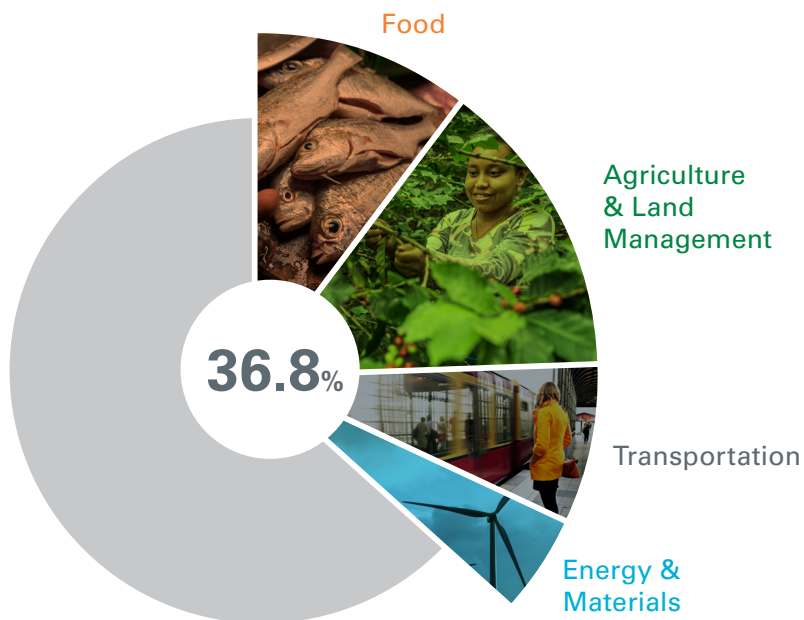
Food

The food we choose to eat, how we cook it, and how we dispose of it all have significant impacts on greenhouse gas emissions. These solutions specifically target the food supply chain that is highly dependent on individual behavior change.

Agriculture & Land Management

Agriculture, forestry, and land use account for nearly a quarter of global greenhouse gas emissions. These solutions address unsustainable land use and farming practices.

Transportation

The transport sector was responsible for over 25 percent of energy demand in 2010, and its emissions are still growing. Solutions focus on the rapid deployment of low-carbon technologies, many of which already exist and simply require adoption at a larger scale.

Energy & Materials

Carbon emissions from the energy sector are expected to double by 2050 without changes to business as usual. Solutions include sustainable behaviors and practices that consume and waste less water, fuel, and natural resources.

APPLYING BEHAVIOR CHANGE TOOLS TO NATURAL RESOURCE CONSERVATION AND CLIMATE ACTION

Achieving full-scale adoption of the 30 behavioral solutions will require using a suite of behavior change tools. The good news is that these tools exist, and solutions around the world are already beginning to deploy them. We have identified three "levers" to inspire and enable behavior change for climate change.

Appealing to Emotion

Emotions are often much more powerful than reason. A history of evidence points to different tactics, such as highlighting one's feelings of pride or joy as a result of sustainable behavior, and shows that these can produce stronger pro-environmental behavioral intentions. Messaging and other interventions that appeal to specific emotions can engage the powerful centers of the brain that are often responsible for decisions.
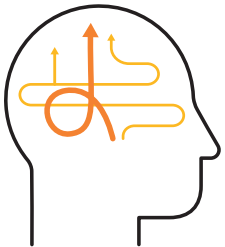
Providing Social Incentives

Humans are social animals. We care about our reputation and how it compares to the status of others in our group. Social incentives and norms can thus be powerful motivators for behavior. We tend to follow the behavioral lead of those we feel are like us or we admire. They can provide cues to members of a group on how to behave, and they also add considerable pressure to change behavior and conform when behavior deviates from expected norms.
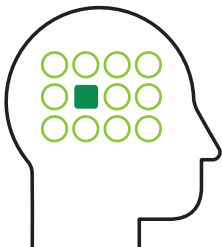
Designing for Choice Architecture

Humans have limited and selective attention and can default to seeking information that confirms our existing beliefs while ignoring new information that contradicts it. Designing for choice architecture means creating an optimal decision-making environment – simplifying what we are asked to do, prompting and reminding us at the right time, and helping us build and expand our mental models of the world around us.

CENTER FOR BEHAVIOR & THE ENVIRONMENT
rare

Rare inspires change so people and nature thrive. Conservation ultimately comes down to people – their behaviors toward nature, their beliefs about its value, and their ability to protect it without sacrificing basic life needs. And so, conservationists must become as skilled in social change as in science; as committed to community-based solutions as national and international policymaking.

The Center for Behavior & the Environment at Rare is bringing the best insights from behavioral science and design to tackle some of the world's most challenging environmental issues. Through partnerships with leading academic and research institutions, we are translating the science of human behavior into practical solutions for conservationists worldwide.

Learn more at rare.org/center and follow us @Rare_org.