

A 3D CAD model of a mechanical assembly, possibly a pump or valve, rendered in blue. The model is shown in a semi-transparent state, revealing internal components like a central shaft and various internal chambers. The assembly is set against a dark background with faint, light-blue wireframe outlines of other mechanical parts, suggesting a complex design environment. The main title text is overlaid on the lower half of the image.

# **Survey Results Overview Sustainable Design Trend Watch Survey**

**American Society of Mechanical Engineers & Autodesk, Inc.  
October, 2012**



# Background

These slides summarize the results from the past four years of the annual Sustainable Design Trend Watch Survey, an online survey that questions members of the American Society of Mechanical Engineers (ASME) about sustainable design trends in mechanical engineering and manufacturing. The survey gathers data from ASME members on how mechanical engineers and manufacturers are practicing “green” or “eco” design and how sustainability in manufacturing is changing over time.

ASME and Autodesk, Inc. have worked closely on this research for the past four years to better understand the factors and impacts of sustainable design on mechanical engineers and manufacturing businesses in industries including automotive and transportation, industrial machinery, consumer products, and energy.

## 2012 Survey Methodology and Demographics

The survey was emailed to ASME professional and student members in the U.S. and responses were collected during a two-week period that concluded in August 2012 (hence the survey results are labeled “2011”).

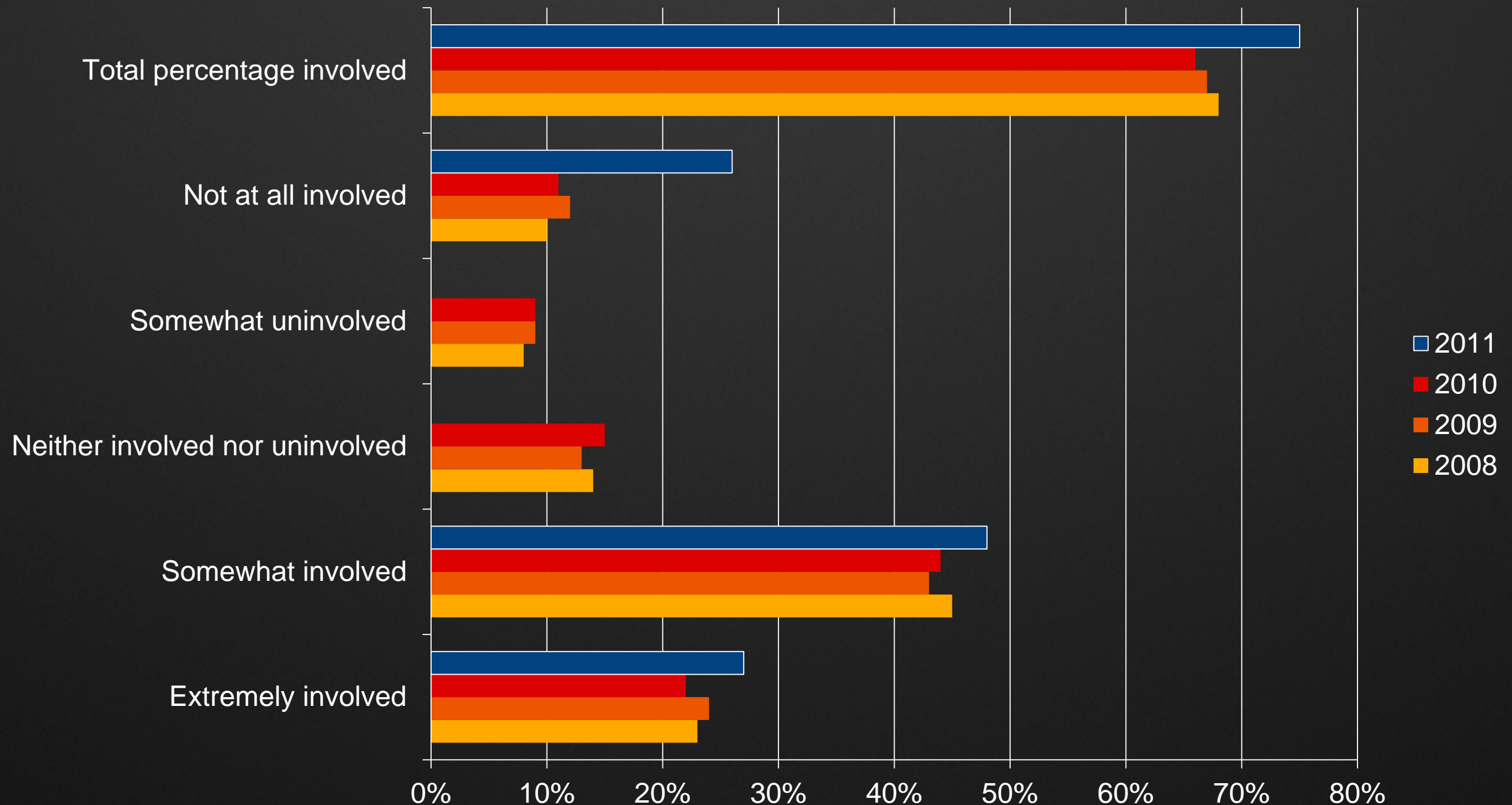
The professional survey consisted of 23 questions and generated nearly 4,470 responses. Approximately 61 percent of the working engineer respondents had more than 20 years career experience. The student survey consisted of 15 questions and generated 1,882 responses. 67 percent of the student respondents were in their undergraduate studies, with the remainder in a Masters or PhD program.

The following tables present details from the surveys of working engineers and students.

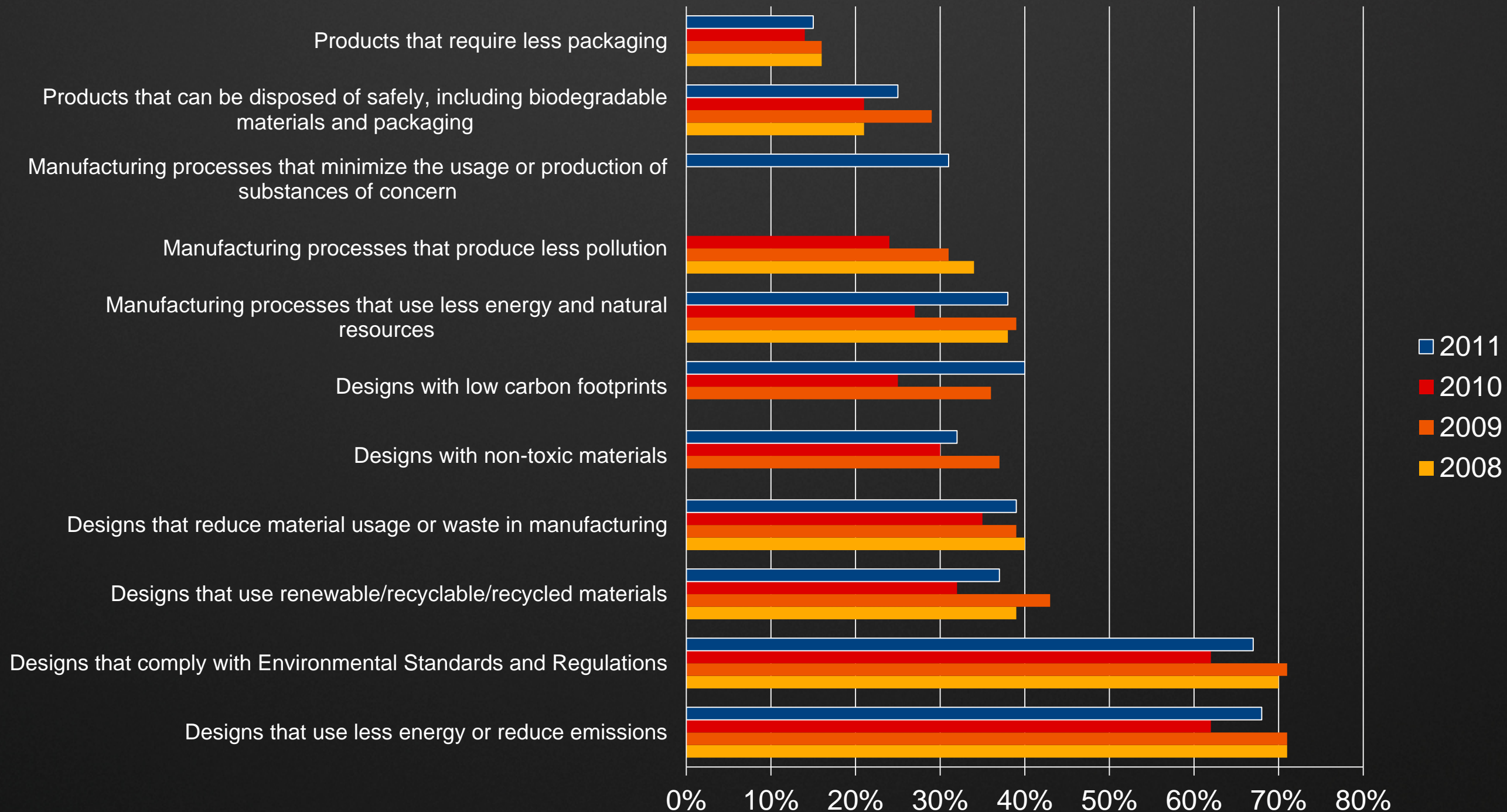
# Professional Results



# How involved is your organization with sustainability or sustainable technologies?

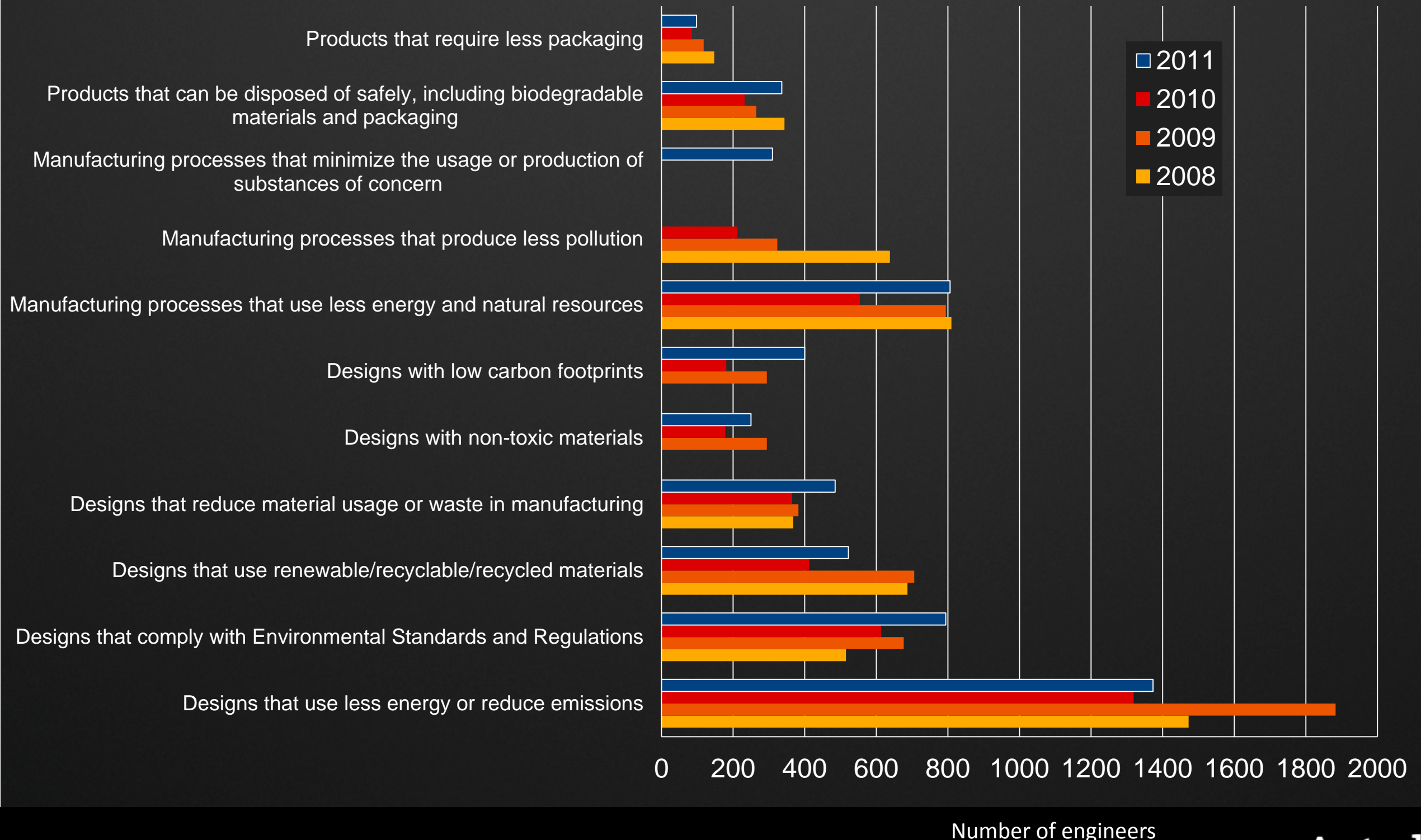


# In which of the following areas of sustainability is your organization currently involved?

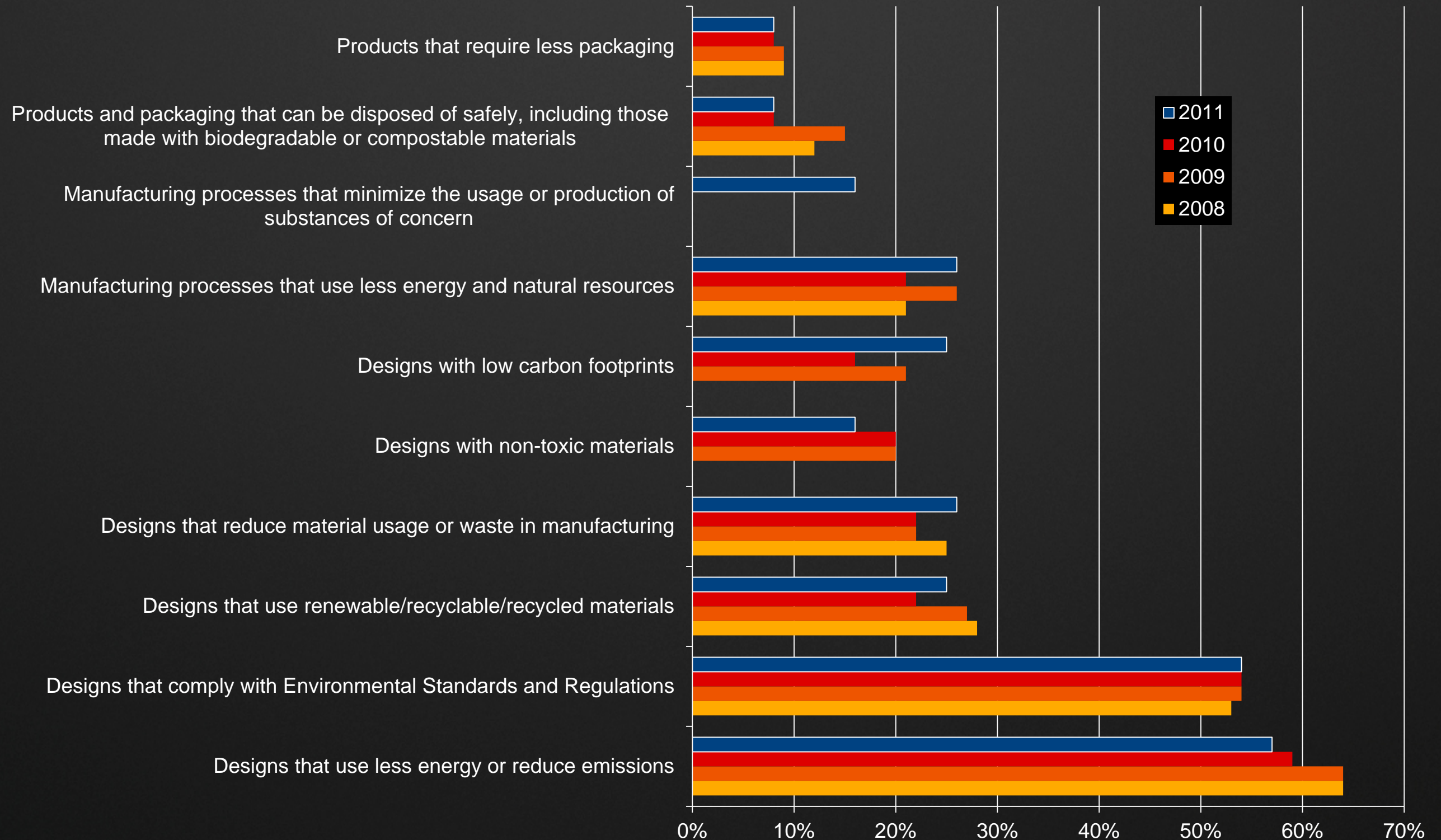




# Which of the following sustainable segments do you consider to be the two most important?

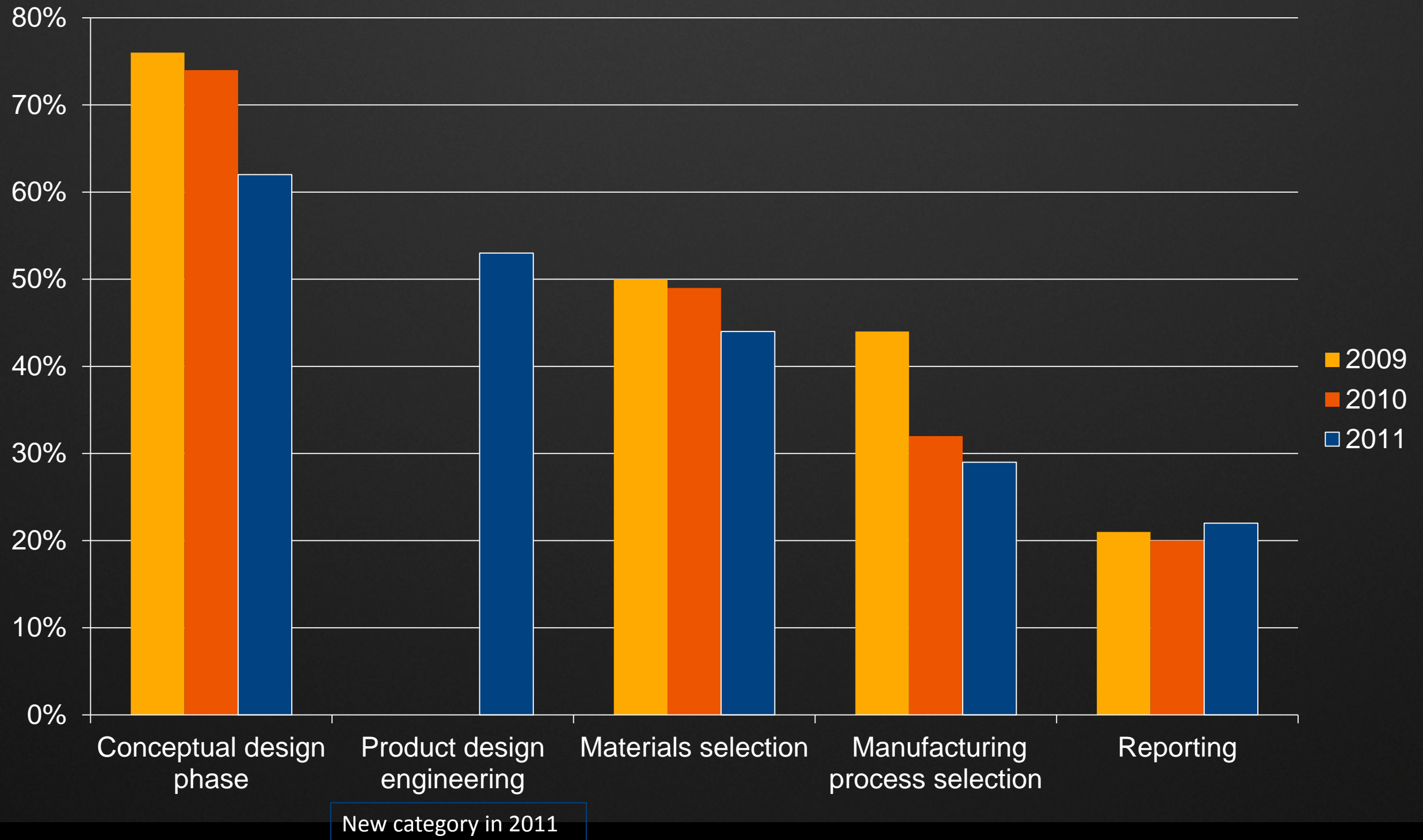


# In which of the following areas of sustainability have you worked in the past year?



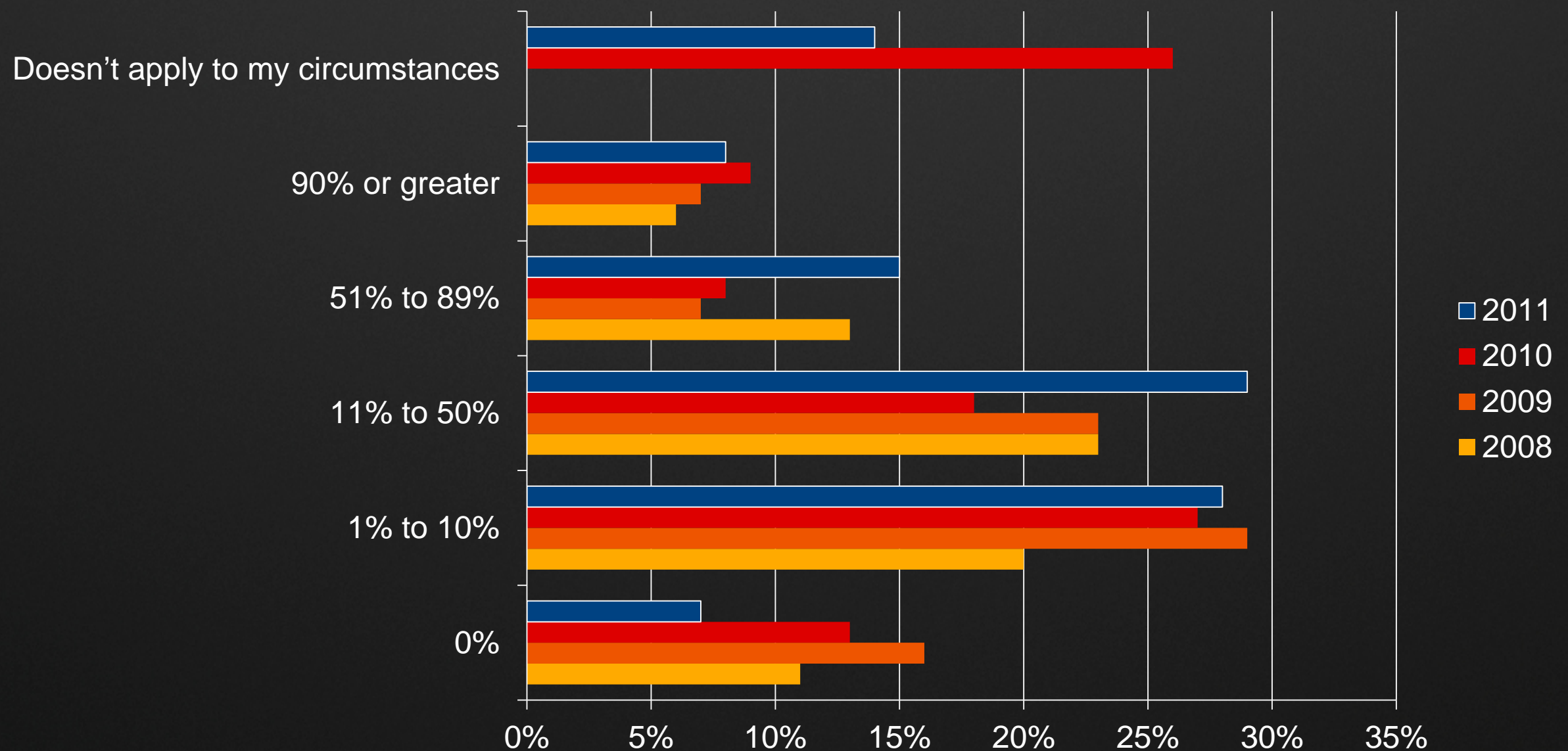


# In which parts of your workflow do you address sustainability?

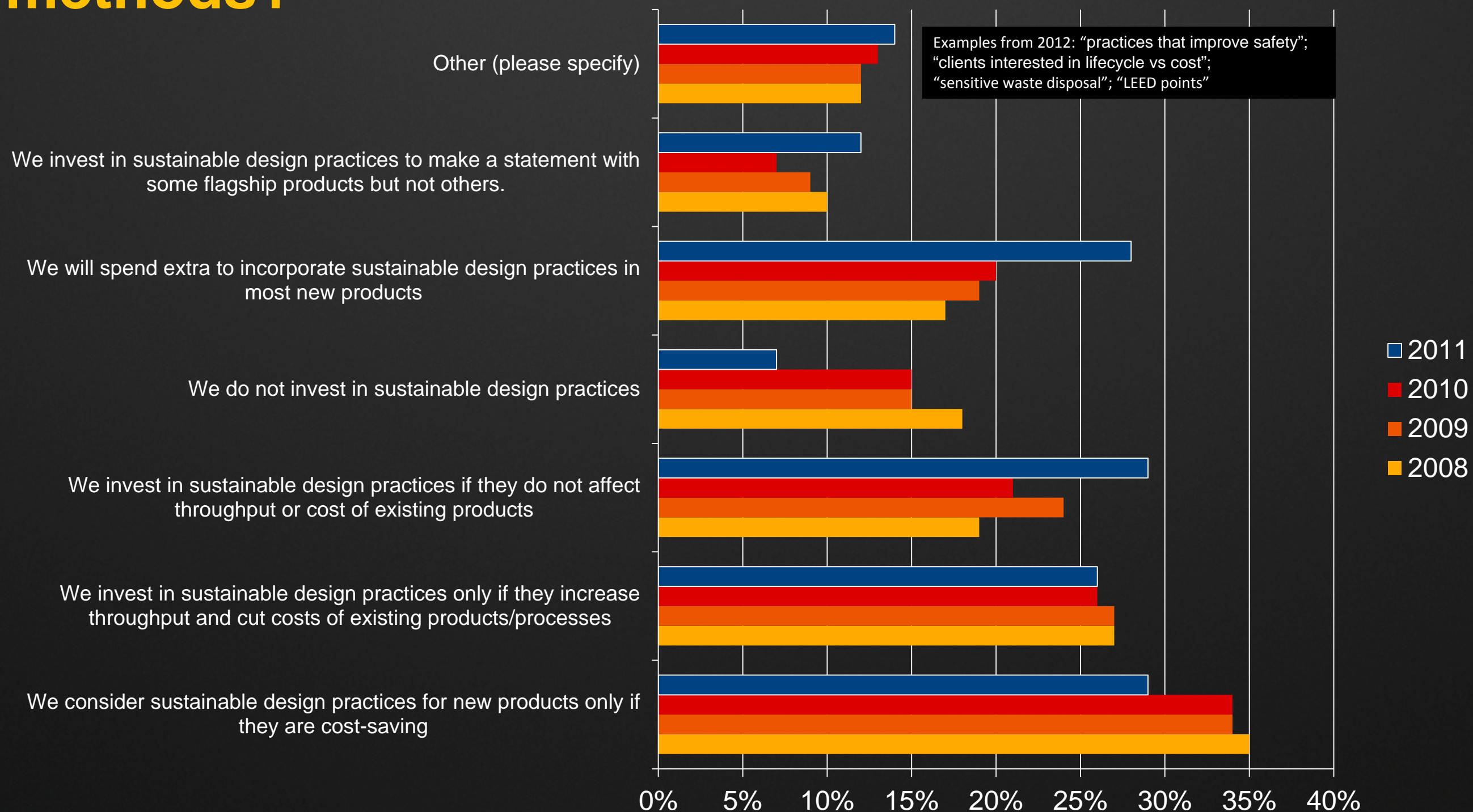




Over the past year, approximately what portion of all of your projects included specifications that were based on sustainable and/or green design principles beyond those mandated by regulations?

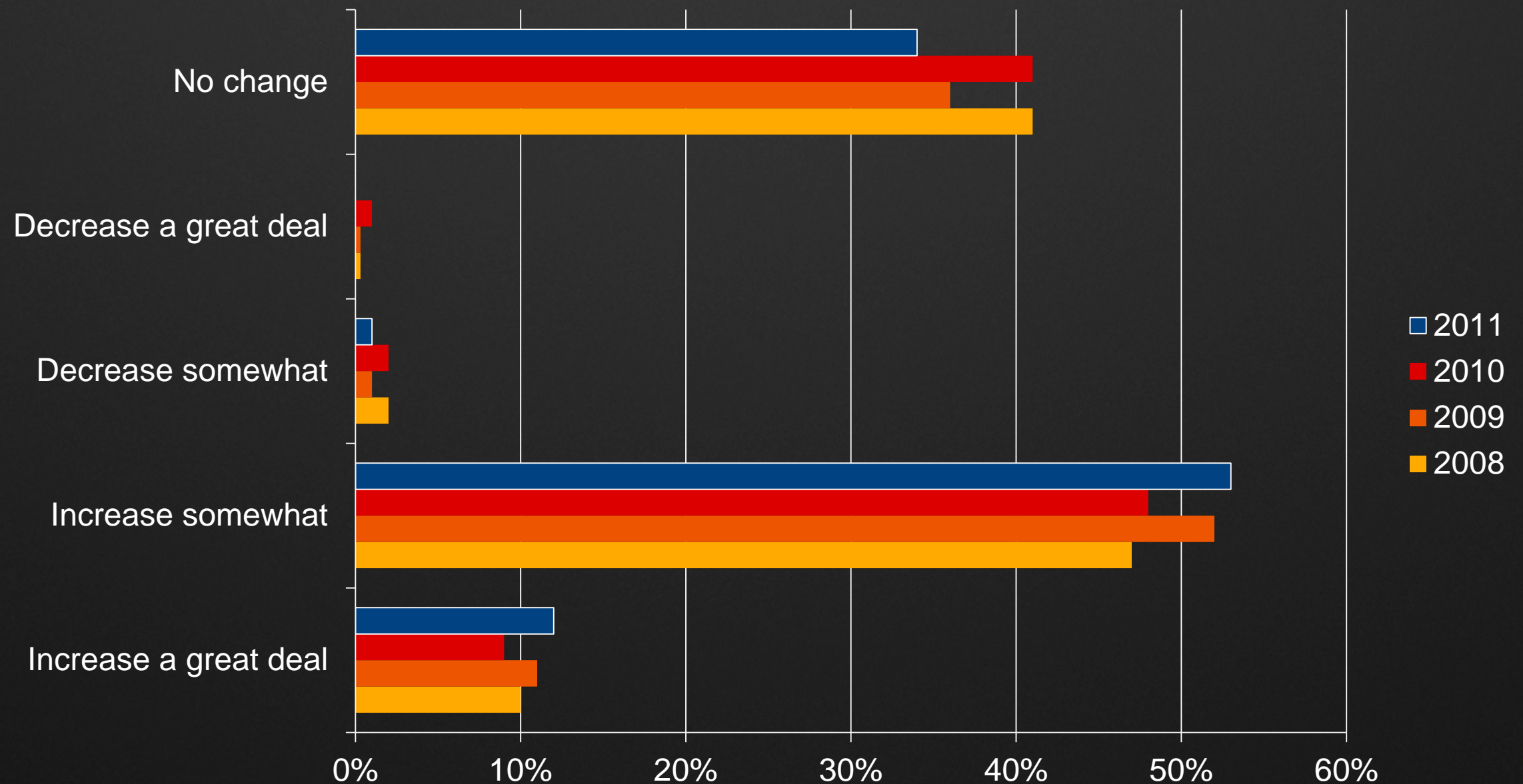


# How does your organization balance priorities that may impact the use of sustainable methods?

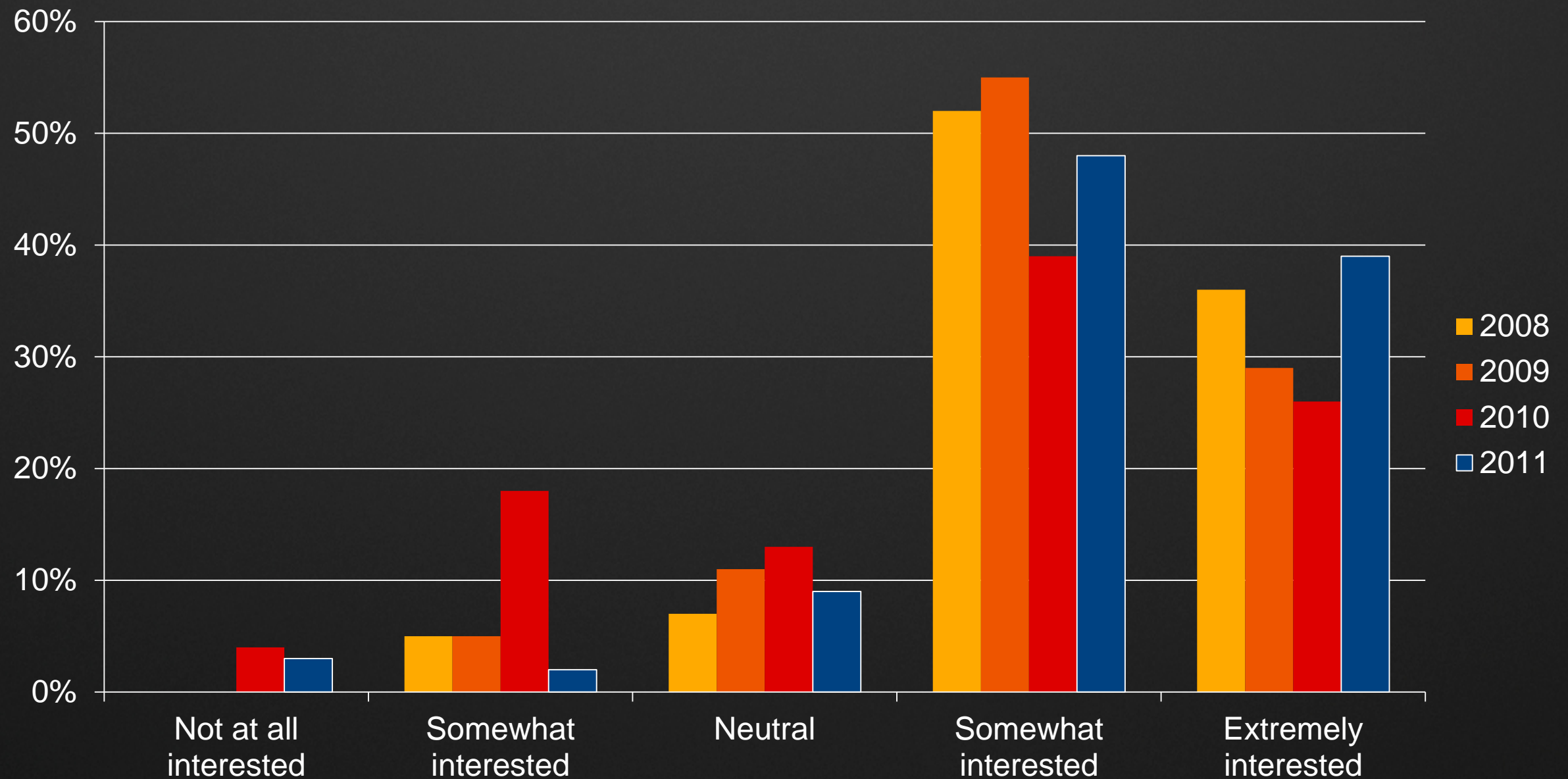




# How do you expect that your organization's involvement in incorporating sustainable and/or green design specifications into its work will change in the coming year?



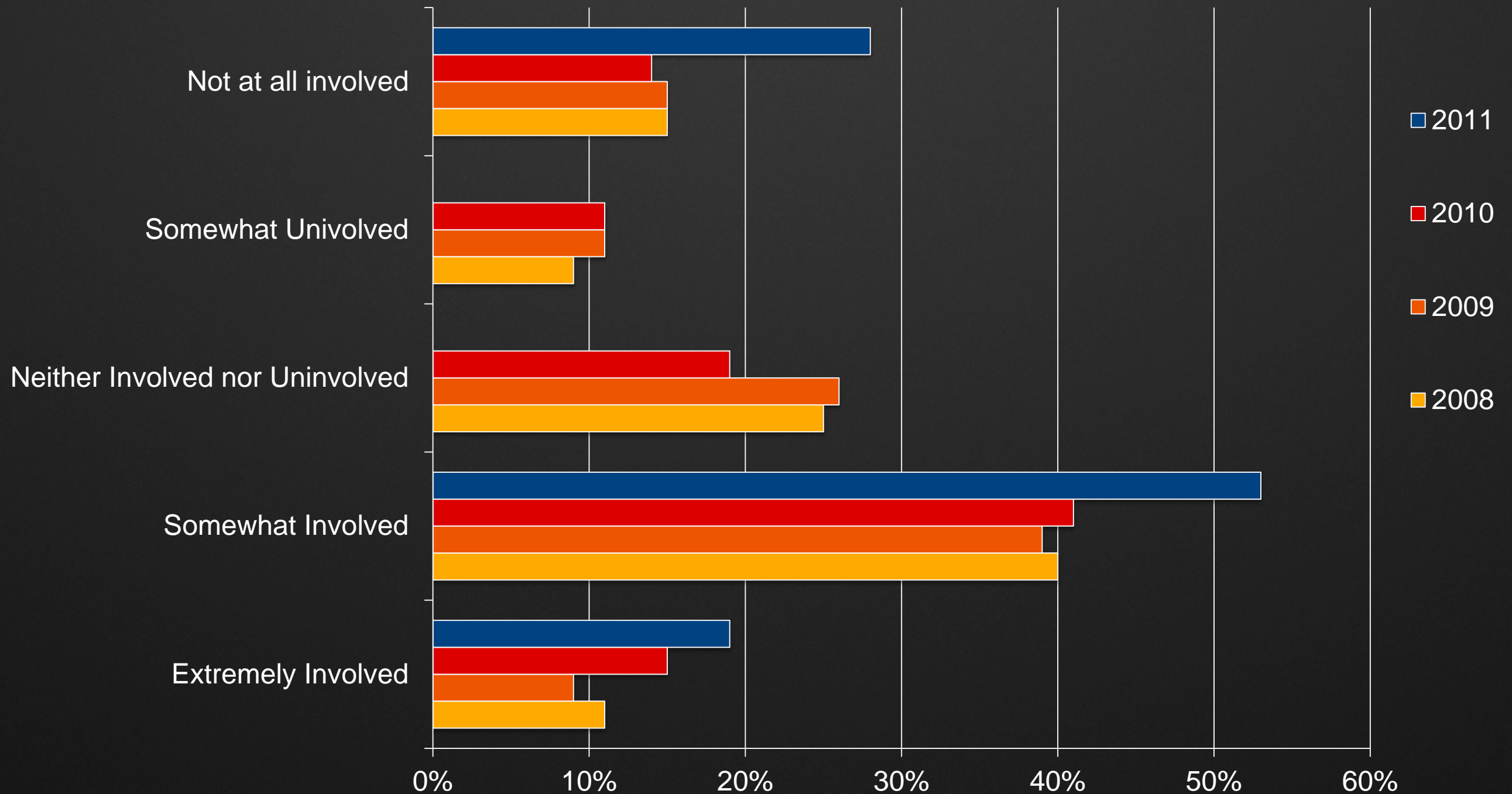
# Outside of work, how interested are you personally in green and sustainable information and causes?





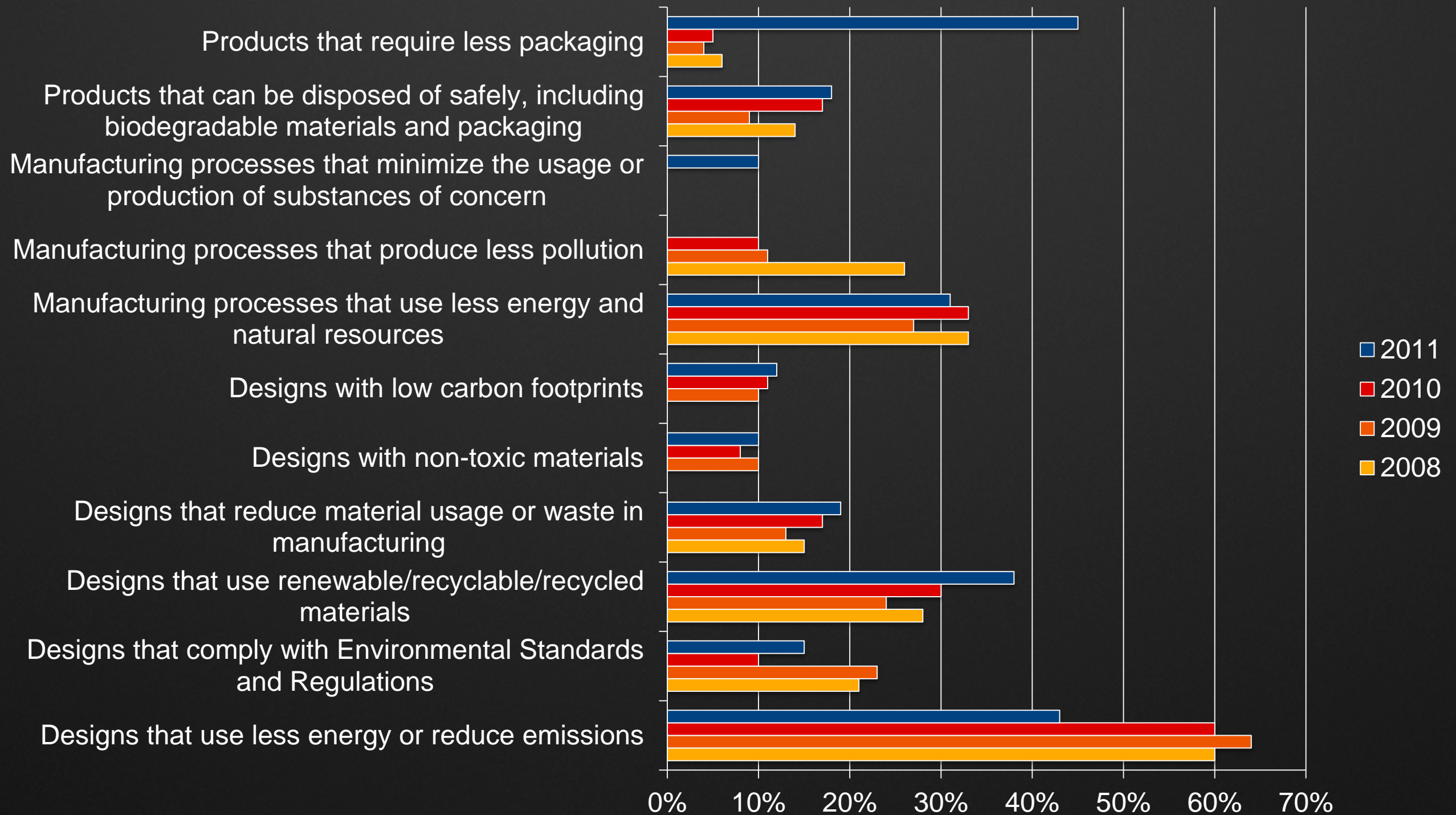
# Student Results

# How involved are you with sustainability or sustainable technologies?

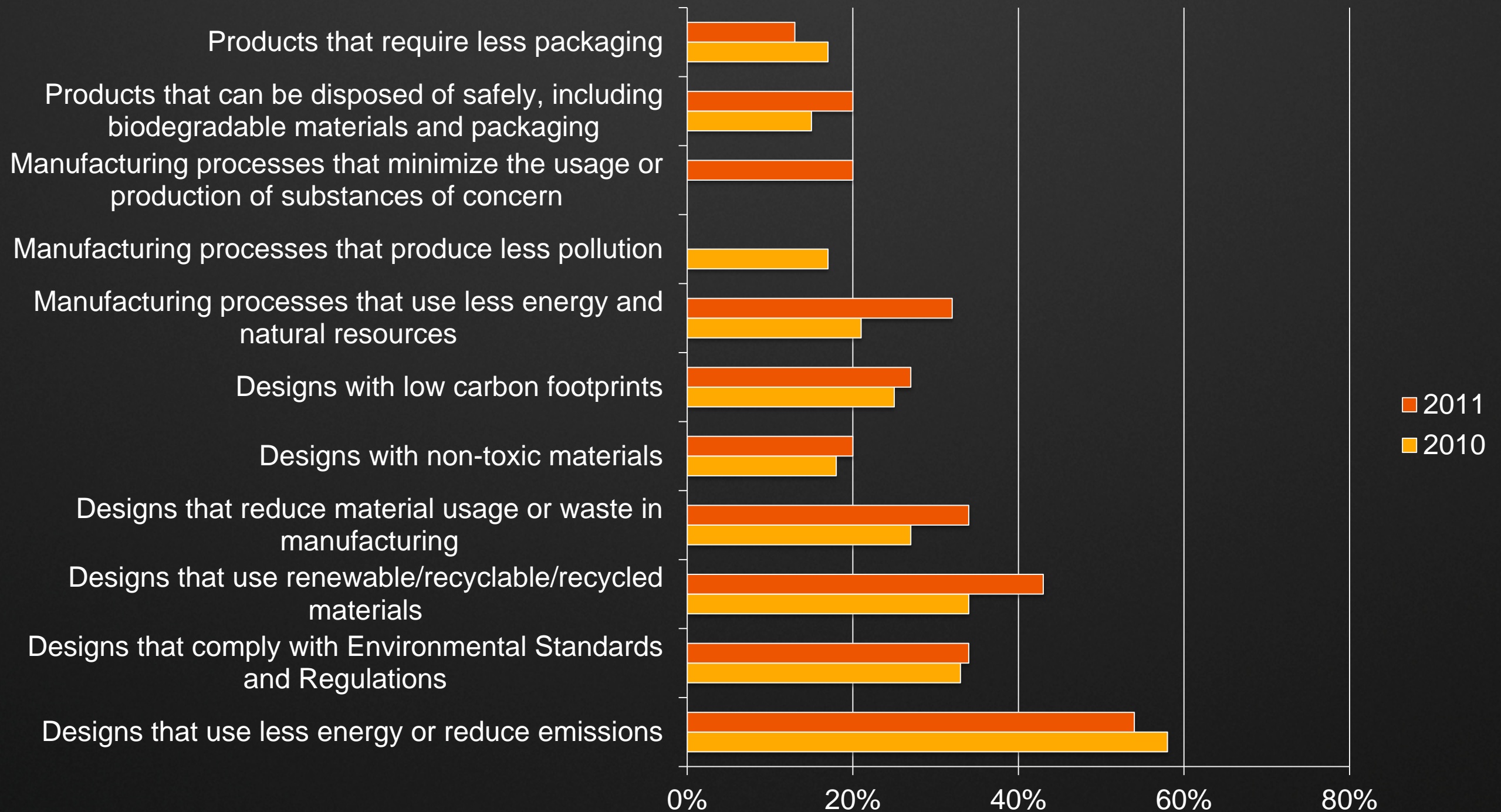




# Which of the following sustainable segments do you consider to be the two most important?

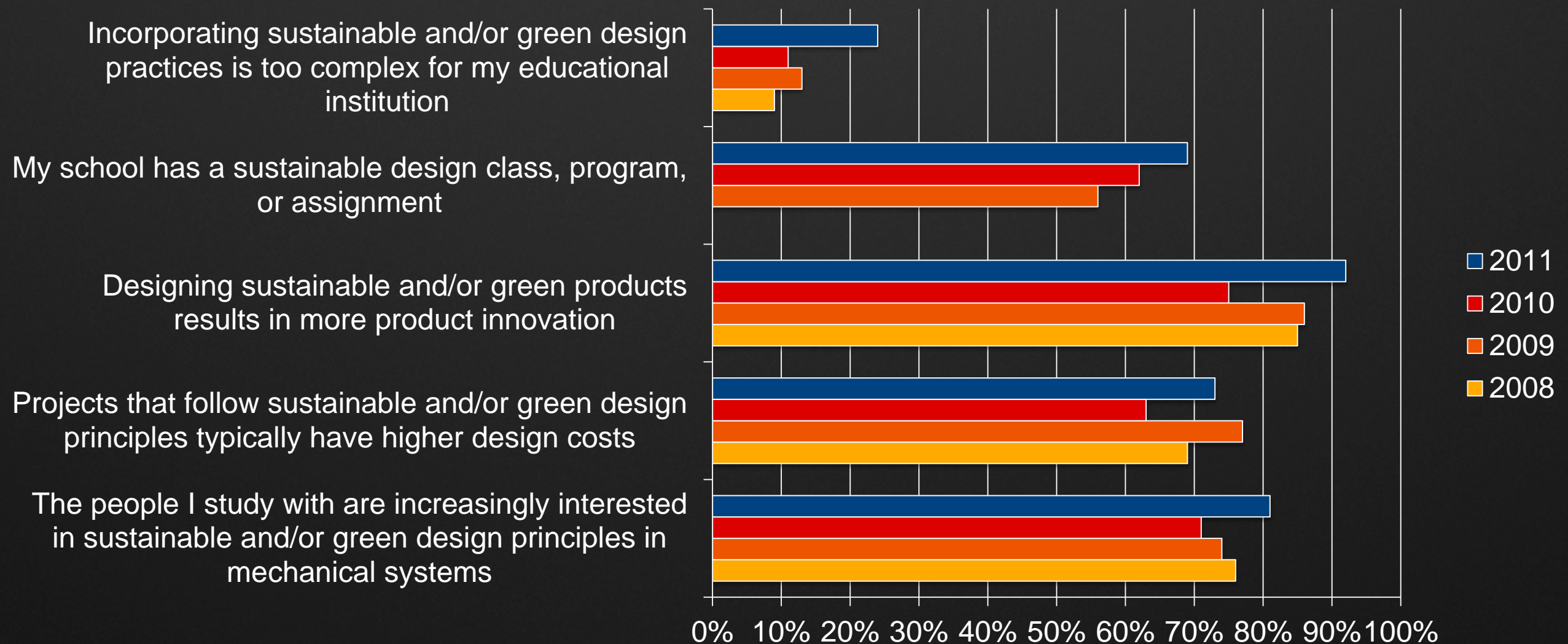


# What kinds of projects are you involved in using sustainability or sustainable technologies? (Check all that apply.)

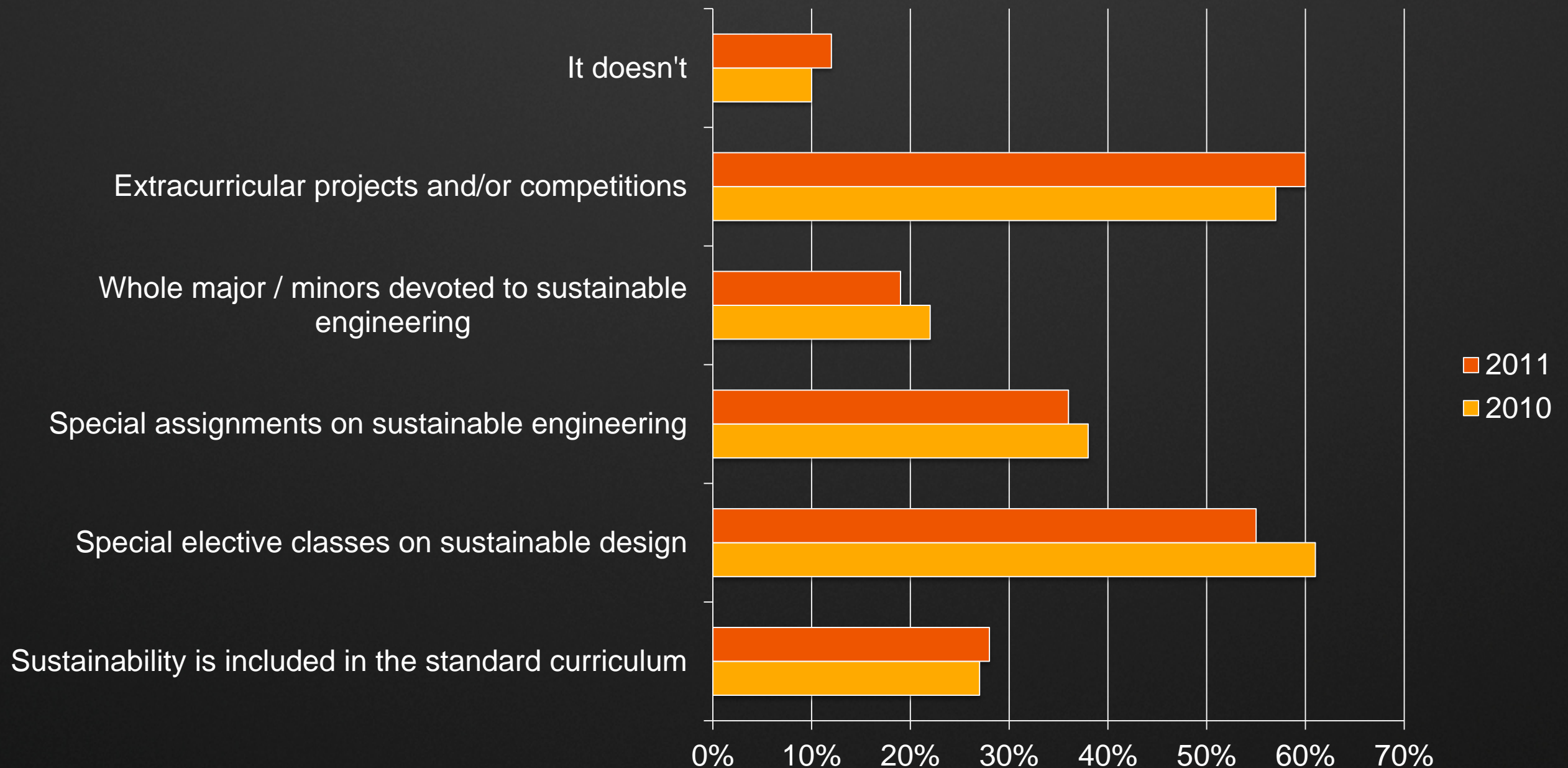




# To what extent do you agree or disagree with each of the following statements about the use of sustainable and/or green design principles in the design, production, and operation of manufactured products?

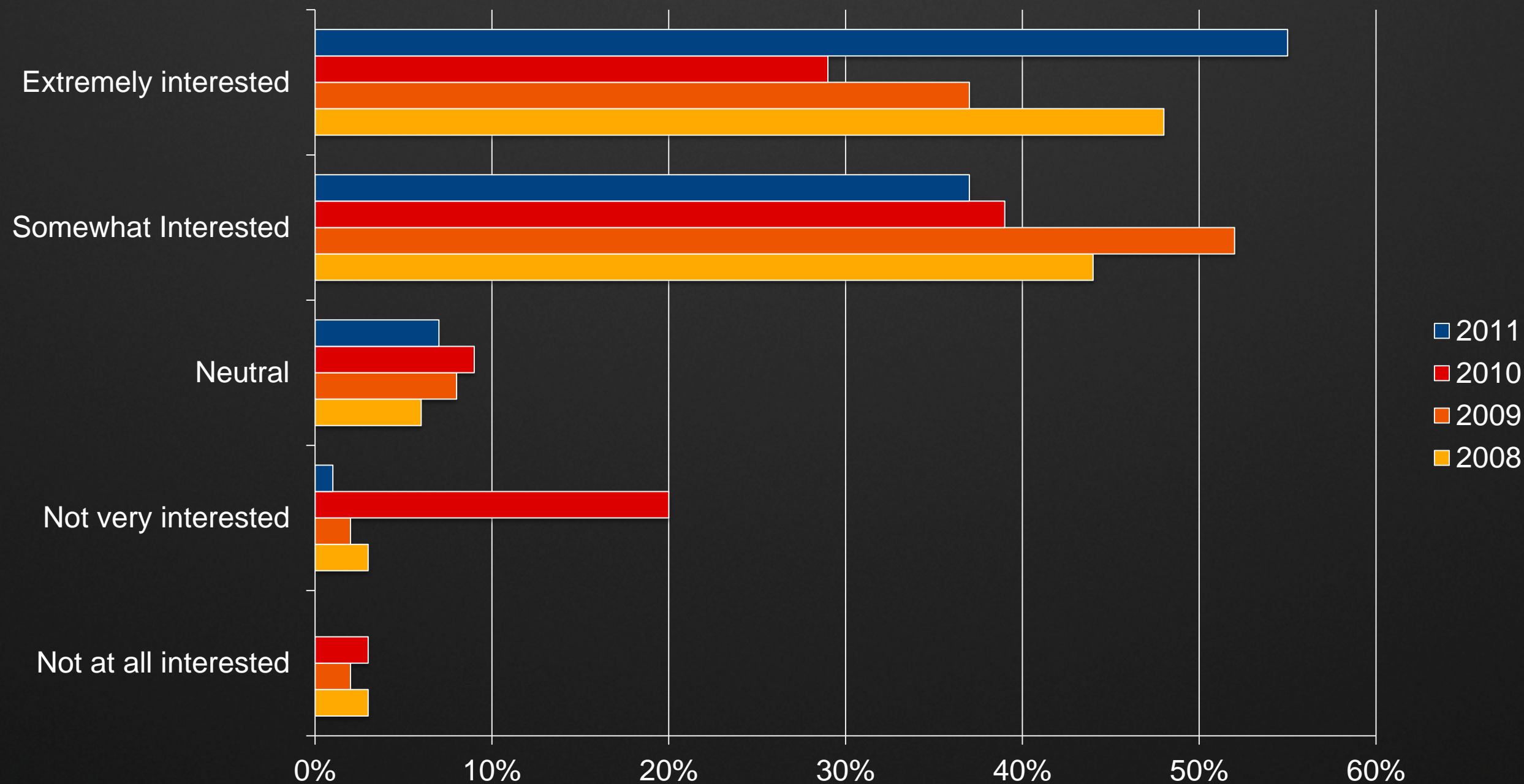


# How does your school provide opportunities for learning about sustainable design principles and/or technologies? (Check all that apply.)

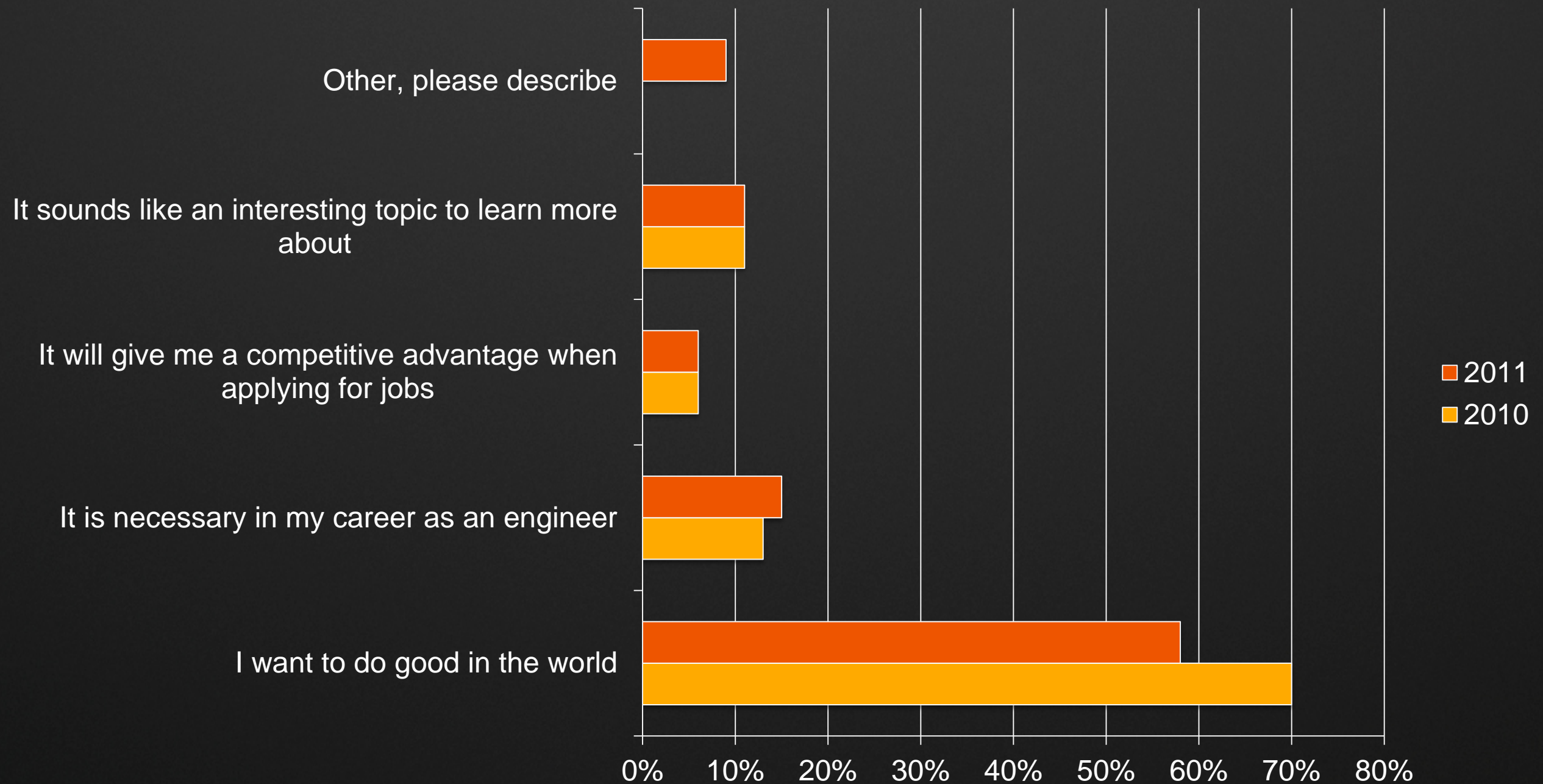




# Outside of your engineering studies, how interested are you personally in green and sustainable information and causes?



# What is the primary motivation for your interest in green and sustainable information and causes?





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