

Market Acceptance of Advanced Automotive Technologies (MA3T) Model

(Oak Ridge National Laboratory)

Objectives

Forecasts sales of competing vehicle technologies among consumer segments. Analyzes how technology, infrastructure, consumer behavior, and policy affect sales of new technologies and determines the resulting societal, environmental and economic impacts.

Key Attributes & Strengths

MA3T can be used to investigate the societal benefits, costs, and employment impacts of market transitions toward hydrogen-powered vehicles. It forecast sales of 40 vehicle choices (for both passenger cars and light-duty trucks) among 1,458 consumer segments in response to changes in technologies, infrastructure, consumer preferences, energy prices, and policies. The consumer segments included represent demand heterogeneity with respect to regions, residential areas, driving patterns, technological attitude, home charging and work charging access.

Platform, Requirements & Availability

Programmed with Visual Basic in Microsoft Excel and can run on computers with Microsoft Excel 2010 or newer versions. Free to use. Can be downloaded from <http://cta.ornl.gov/ma3t/> or requested by contacting Zhenhong Lin (linz@ornl.gov).

