

# [Climate change and its consequences](https://assignbuster.com/climate-change-and-its-consequences/)

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Climate changeand its consequences have recently grown in importance on political agendasworldwide. CO2 emissions is one of the gases that has a dramatic impact on the environmentresulting in rising coastal flooding, reduction in water supplies and increase malnutrition(IEA, 2010).

In order to protect theenvironmentfor future generations, a global reduction inCO2 emissions is required along with reduced consumption of non-renewable energyresources. One major CO2 contributor is the transport sector, which is responsible for arounda quarter of EU greenhouse gas emissions, making it the second biggest greenhouse gasemittingsector after energy.

While emissions from other sectors are shrinking, those fromtransport have increased by 36% since 1990. As a consequence, the European Union has setmandatory emission reduction targets for passenger cars of 95g/km by 2020, which is areduction of 40% compared to 2007. Automobile manufacturers that fail to comply facedrastic fines.

In order to reach these targets and prevent penalty payments for excessemissions, innovative propulsion systems have gained increasing attention. Vehicles withelectric propulsion are considered as a promising alternative on the pathway towards lowemissionvehicles that could enable the transport sector to reduce emissions significantly. During the last few years, electric vehicles (EV) got more and more attention in national andEuropean policies and public awareness increased significantly.

While much effort has beenput in the research and development of e-mobility, less attention has been paid to consumers'acceptance (Yeh, 2007). The majority of consumers still consider EVs as disadvantageouscompared to traditional cars. However, without consumer acceptance there will be notechnological shift and long-term success of sustainable transport systems (Wiedmann et al., 2011).

Therefore, it is crucial to gain in-depth insights in consumers' perception towards EVsthat affect preferences for and the adoption of alternative fuelled vehicles.