

**An applied comparative study about the countries with low sustainability and high CO<sub>2</sub>-emission and advanced sustainability knowledge in Europe and giving practical models to improve and implement sustainability solutions  
(case: Iran, Denmark, Germany)**

**Hamid Doost Mohammadian, Fatemeh Rezaie\***

1. Professor at University of Applied Sciences (FHM) and TU Berlin, Germany, Doost@fh-mittelstand.de
2. Doctoral (DBA) Candidate at FHM University, Iran, baharrezaie70@gmail.com

**Abstract:**

Nowadays, we passed the 1st, 2nd, 3rd and 4th waves (ages). Before 1970 fossil energies and various businesses could affect and improve technologies, economy. Since we reached the 70ies the technologies and renewable energies able to change and improve environment, and even impact our lives. In recent decades, global environmental challenges such as climate change, increasing temperature and greenhouse gases emission, infrastructure challenges, and health diseases threaten the future of the world and humans' beings. It is vital to struggle with these problems to maintain the world. Furthermore, sustainable world is required to achieve livability and high quality of life. A balance between the community and the individual, trust and control, consumption of natural resources and nature's ability to restore, social responsibility and security, stable economic, preserving natural resources, stable environment, natural environment are required to create sustainable country. Sustainable countries with low greenhouse gases emission such as CO<sub>2</sub> could create sustainable world with high quality of human life.

So, all countries should participate to reduce CO<sub>2</sub> emission and develop sustainability from regional, local, national, international, multinational and global in the World. Fundamentally, changing the life style is required to lead the world to sustainable green life. In this applied research, solutions to implement and improve sustainable environment for Iran based on developed countries' policies are proposed. Suggested solutions are based on documented experience of Dr. Doost Mohammadian (author) on sustainability such as cooperating with Danish Sustainable Platforms Company, working with Erasmus+ as an academic leader in Germany from 2017, cooperating with Copenhagen's former mayor and researching on sustainability from 2012 and consulting the German MV state Minister of Energy and Infrastructure to cooperate with Iran in 2016. Finally, three practical models are proposed by authors.

**Key words:** Sustainable Countries, Environmental Sustainability, CO<sub>2</sub> Emission, Global Challenges, Sustainability Solution, Quality of Life