

## عنوان مقاله:

Wastewater Treatment Plant Assessment by Quantifying the Carbon Footprint: a case study of Maragheh city, Iran

## محل انتشار:

هشتمین کنفرانس بین المللی مهندسی کشاورزی، منابع طبیعی و محیط زیست (سال: 1401)

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## خلاصه مقاله:

Global warming and climate change are caused by excess emissions of greenhouse gases (GHGs) (i.e., carbon dioxide (CO<sub>2</sub>) and methane), which are major problems for the environment. Estimates of GHGs can be obtained from the carbon footprint analysis. This research measures the carbon footprint in a wastewater treatment plant in Maragheh city (Iran) by utilizing the Greenhouse Gas Protocol (GGP), a framework for tracking direct and indirect carbon emissions. According to the GGP framework, all energy consumption sectors in the Maragheh wastewater treatment plant is identified and then quantified to carbon footprint through the use of coefficients for each sector. The GGP framework is divided into three categories including scope ۱ (fuel combustion, company vehicles, fugitive emissions), scope ۲ (electricity), and scope ۳ (purchased goods and services, employee commuting, waste disposal, transportation and distribution).

## کلمات کلیدی:

.Global warming, greenhouse gases, carbon footprint, energy consumption

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1549528>

