

Technical Guide for Estimating Building Rooftop Solar Potential in a City

Einav Grinberg

2022-03-11

Contents

Introduction



In 1990, cities accounted for 45% of global final energy use, but by the end of 2020, this share had risen to approximately 75% and cities release a similar share of global energy-related CO₂ emissions. Today, most of the world's energy supply is generated from fossil fuels, coal, oil, and natural gas. Fossil fuels are non-renewable sources of energy, and their use has a negative impact on the world's economy, ecology, and climate ¹. Therefore, the use and need for renewable energy resources such as solar energy, is increasing and becoming more possible due to the rapid development of relevant technologies and scientific knowledge.

¹REN21 (2021), Renewables in Cities 2021 Global Status Report (Paris: REN21 Secretariat)