



HEALTHFX

HEALTH CO-BENEFITS OF GREEN BUILDINGS

HOW DO WE IMPROVE HEALTH, REDUCE ENVIRONMENTAL IMPACTS AND LOWER OPERATING COSTS?

New research from the Harvard T.H. Chan School of Public Health says green-certified buildings are the answer.

GREEN-CERTIFIED BUILDINGS¹: ENERGY, HEALTH AND CLIMATE BENEFITS

AT THE COUNTRY LEVEL

FOR EVERY **\$100** SAVED ON ENERGY² IN GERMANY

ANOTHER **25¢** IS SAVED IN HEALTH AND CLIMATE BENEFITS^{3,4}



AT THE BUILDING LEVEL



ENERGY SAVINGS

GREEN-CERTIFIED BUILDINGS SAVE \$13.75 PER SQUARE METER



HEALTH AND CLIMATE COST SAVINGS

AND \$3.80 PER SQUARE METER IS GAINED IN HEALTH AND CLIMATE COST SAVINGS



TOTAL SAVINGS

FOR A TOTAL BENEFIT OF \$17.55 OF SAVINGS PER SQUARE METER

THE IMPACT: GERMANY

COMPARED TO "CONVENTIONAL COMMERCIAL BUILDINGS,"¹ THE GREEN-CERTIFIED BUILDINGS STUDIED SAVED

\$239M IN ENERGY COSTS⁵

PLUS AN ADDITIONAL

\$59M

IN COMBINED HEALTH AND CLIMATE BENEFITS:

\$17M

FROM AVERTING NEGATIVE IMPACTS OF CLIMATE CHANGE³

\$42M

FROM REDUCTIONS IN AIR POLLUTION RESULTING IN FEWER DEATHS, HOSPITAL VISITS, LOST DAYS OF WORK AND SCHOOL, AND MORE⁴

FOR A TOTAL BENEFIT OF **\$298M SAVED**

FROM 2000-2016⁶

#THEHEALTHFXSTUDY

To learn more about the health co-benefits of green-certified buildings, visit:

THEHEALTHFXSTUDY.COM

1 2016 USD, LEED® buildings 2000-2016.

2 All the obtained cost-saving dollar values were converted into 2016 USD, adjusted by the annual Consumer Price Index (CPI) of U.S. city average. BLS, CPI Databases. 2017, Bureau of Labor Statistics.

3 Includes carbon dioxide, methane and nitrous oxide and their associated climate damages. These are economic benefits associated with avoiding the negative consequences of climate change – such as the spread of disease and coastal damage.

4 Includes public health impacts from exposure to ozone and PM_{2.5}, including deaths, hospitalizations and asthma attacks avoided.

5 Energy cost savings were calculated based on the prices for each energy type.

6 The study analyzed LEED-certified buildings in the United States, Brazil, Mainland China, Germany, India and Turkey. This accounts for 82% of LEED buildings, and 30% of all green-certified buildings.