



The High Value of IAQ and Buildings

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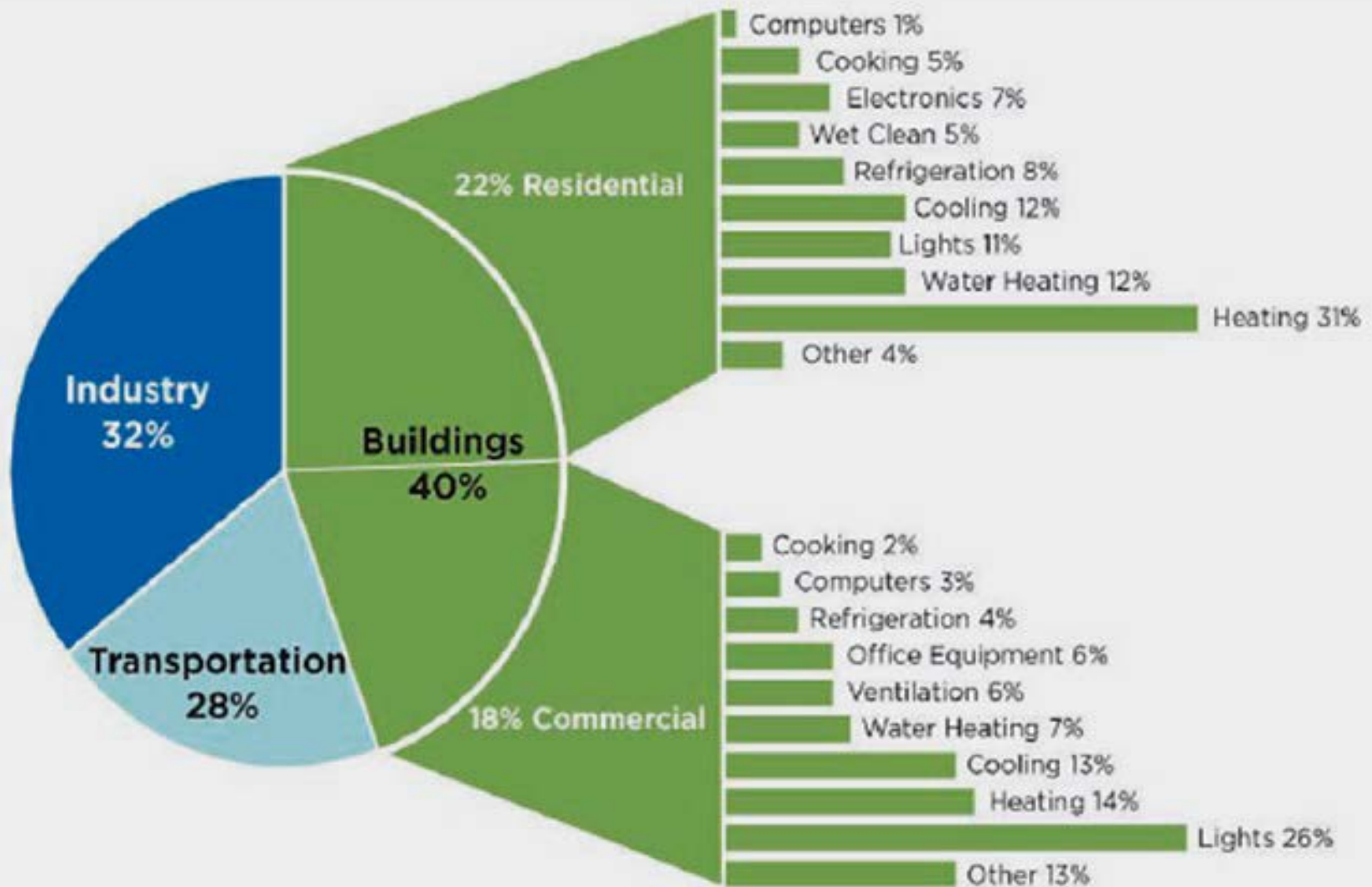
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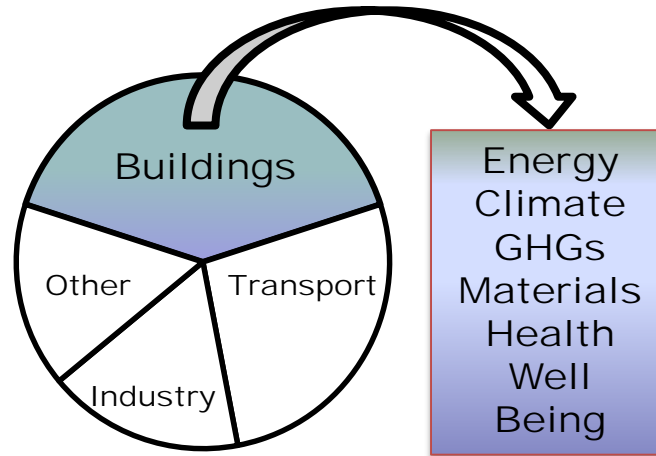
*“It [buildings] is your greatest opportunity
to increase your quality of life,
improve your health and productivity,
reduce the consumption of resources,
and reduce costs.”*

- Bob Berkebile, FAIA

Buildings have a huge
impact on all aspects of
People,
Planet,
and
Prosperity







Buildings

14% of US GDP

40% of energy use

43% of carbon emissions

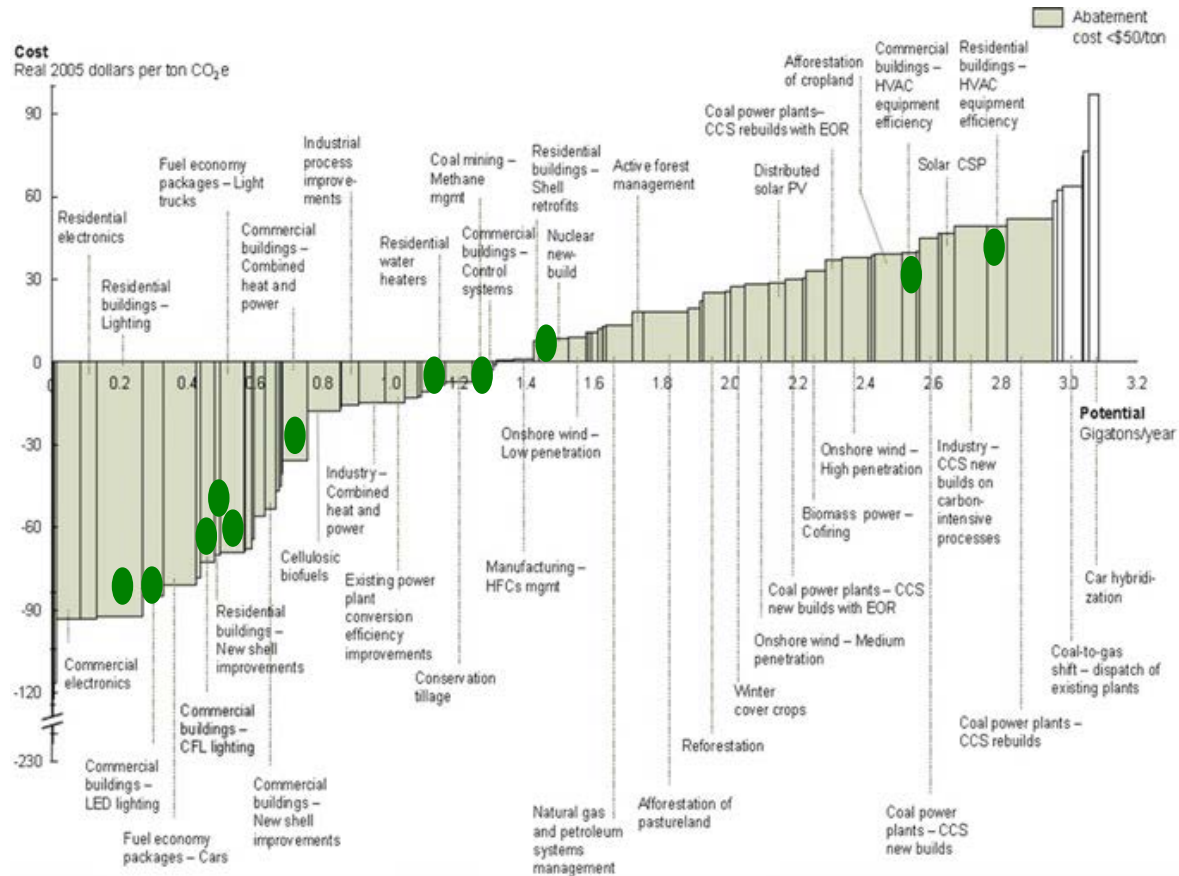
60% of non-industrial waste

13% of fresh water consumption

90% of our time is spent indoors

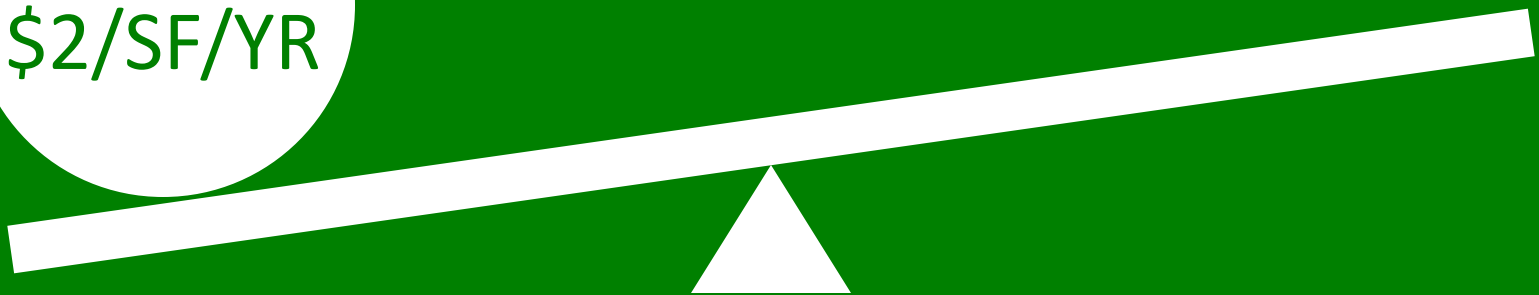
0.2% of all federally funded research

● = Building Sector. Below line are best



Example of Potential Value

Typical Commercial Building



100x
larger
value
(circles
are
actual
scale)

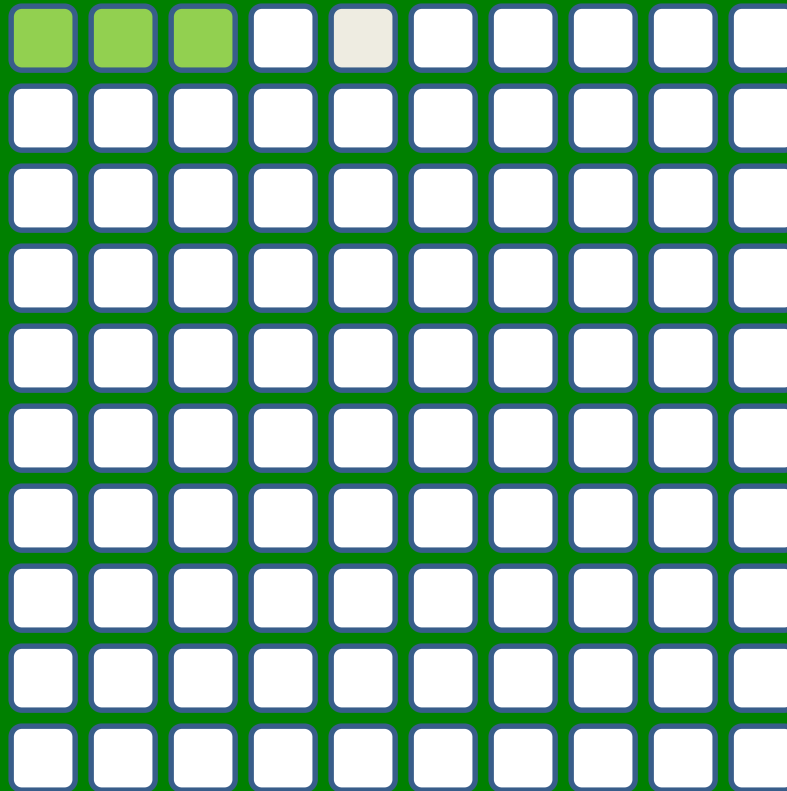
People
\$200/SF/YR

Energy
\$2



Even with all the explosive growth in awareness and construction of green buildings during the past decade, the vast majority of new and existing buildings are not yet “green”

Maybe 3%?



Common misperception today ...

Better building costs too much!

Why?

We're using the wrong metric

**To get the 97% on board, we
need to address their bottom
lines ... a new metric**

**Metrics around energy savings,
water savings, and recycling are
all important ...**

**but are not the reasons that we
build buildings**

**We build workplaces to improve
productivity**

**We build schools to improve
learning performance**

**We build homes to improve
health and comfort**

**These are the bottom line
reasons we build buildings**

**But the metrics for these reasons
are missing**

**These metrics could catapult the
remaining 97% into better
buildings**

Trends

- Develop a new set of metrics
 - Building based (schools, workplaces, ...)
 - Value based (health, productivity, performance)
- USGBC to IWBI
- Consumer air monitors
- Low cost air sensors and ventilation

One Primary Piece Missing

