

Gensler

URBAN LAND INSTITUTE

DESIGNING HEALTHY PLACES

PRESENTED BY:

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How does the
built environment
affect health?

**Design
impacts
well-being.**



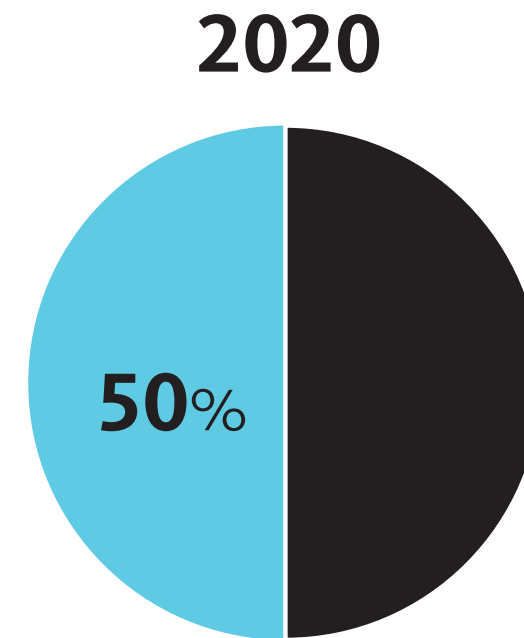
Healthy Workplace Design Drivers

RECRUITMENT AND RETENTION 
 millennials user control DAYLIGHTING
ERGONOMICS ACTIVITY temperature acoustics 
incentives  nutrition  SMELL MOTIVATORS
WELL BEING AMENITIES brand 
 personal preference BUSINESS PERFORMANCE
RESTORATIVE ENVIRONMENT
HUMAN CAPITAL **water**  interaction with nature

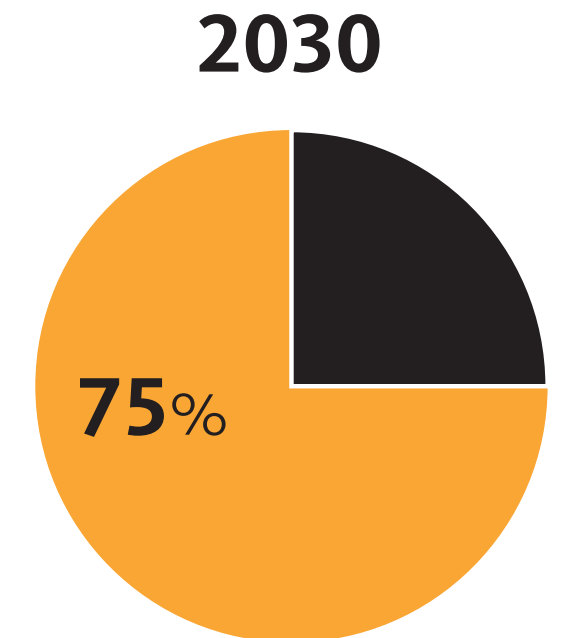
Talent Diversity is Changing Talent Demands

Millennials are demanding healthy environments

- Live/Work Balance: **Health & Wellness**
- Authenticity: **Anti-corporate**
- Transient: **Want it now**
- Purpose: **Make a difference**



Millennials in
U.S. Workforce



Millennials in
Global Workforce

— FORBES, WHY YOU SHOULD BE HIRING MILLENNIALS, JULY 2012

Why Healthy Workplace?

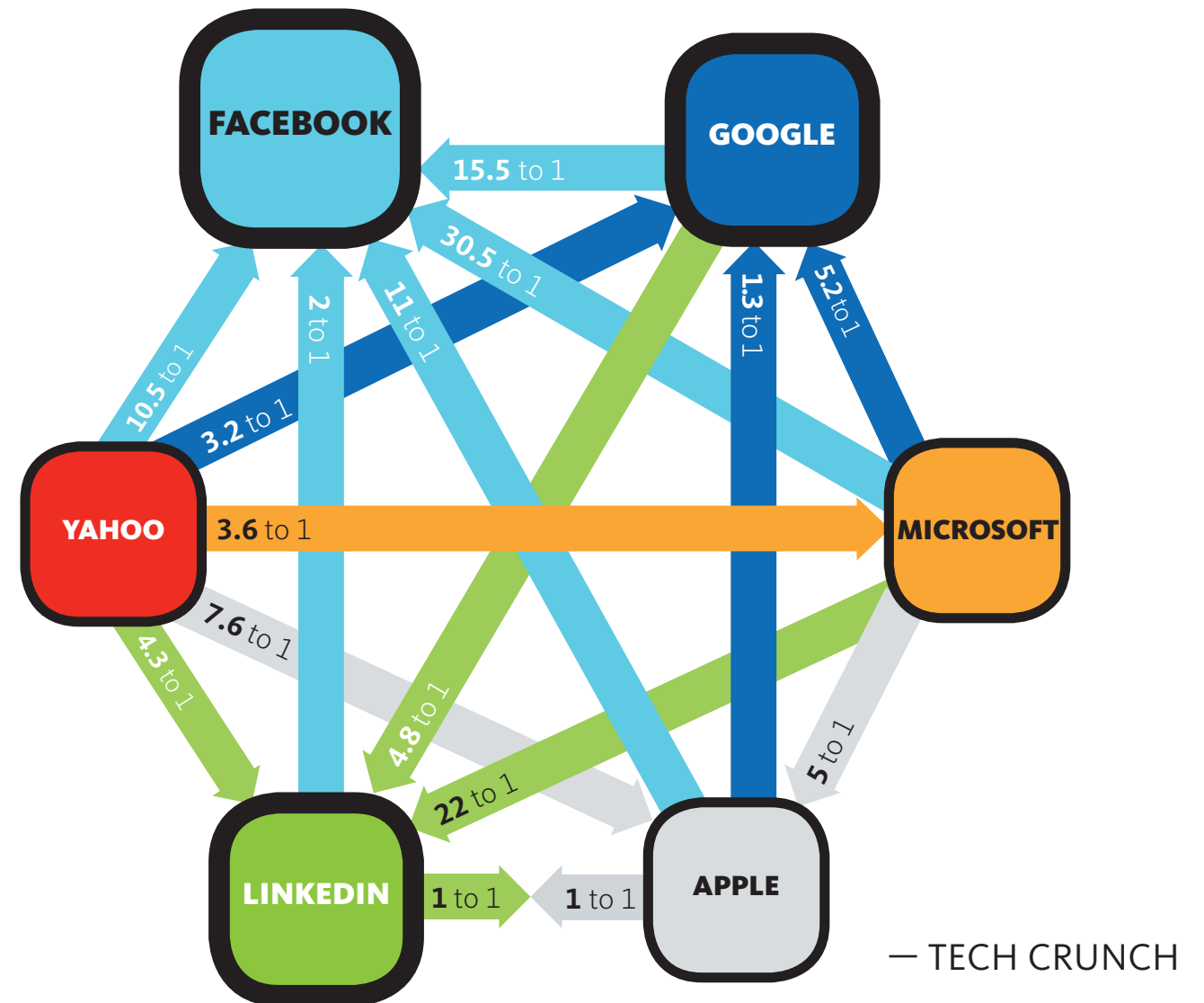
Attracting Talent

A TECH CASE STUDY:

Companies are willing to go to great lengths to attract, keep and nurture fresh talent with innovative ideas.

\$ The cost of human capital

RATIO OF EMPLOYEES MOVING FROM COMPANY A TO COMPANY B



Why Healthy Workplace?

What if the workplace could feel like this?

A healthy employee is

3x

more productive than
an unhealthy one.

— HEALTH FUTURES STUDY, 2010



Why Healthy Workplace?

Wellness Amenities

Concierge

Tech (Genius) bar

Coffee bar

Laundry

Dry cleaning

Day care

Dog walking

Nutritionist

Dentist

Cooking classes

Wellness classes

Fitness classes

Micro kitchen

Sports bar

Community center

Quiet rooms

OUTDOOR ACTIVITIES

Amphitheater

BBQ pits

Screening area

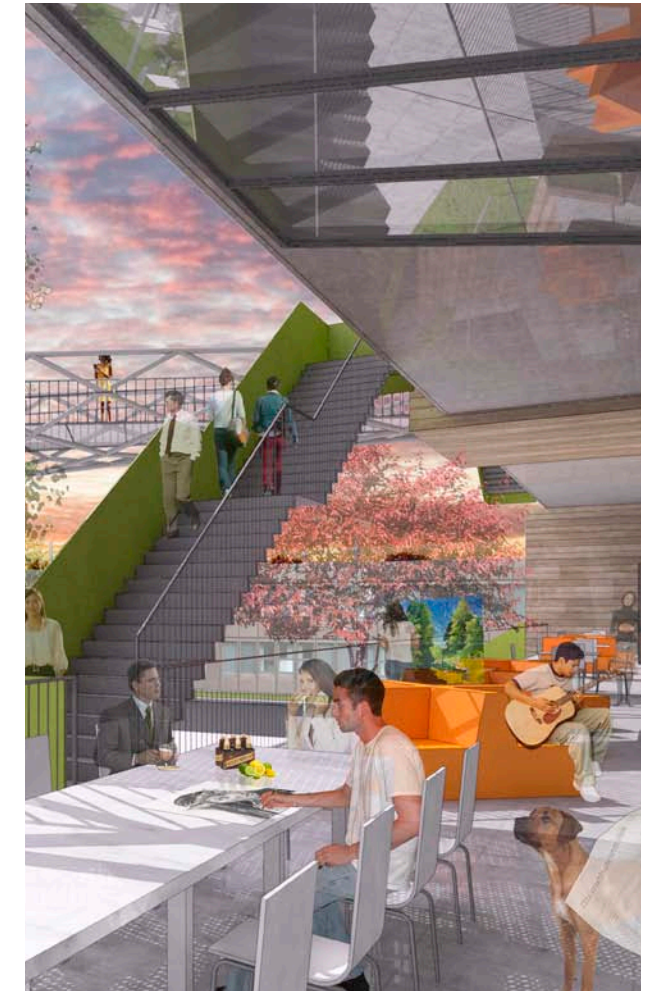
Bike share

Basketball court

Volleyball court

Tennis court

Food trucks









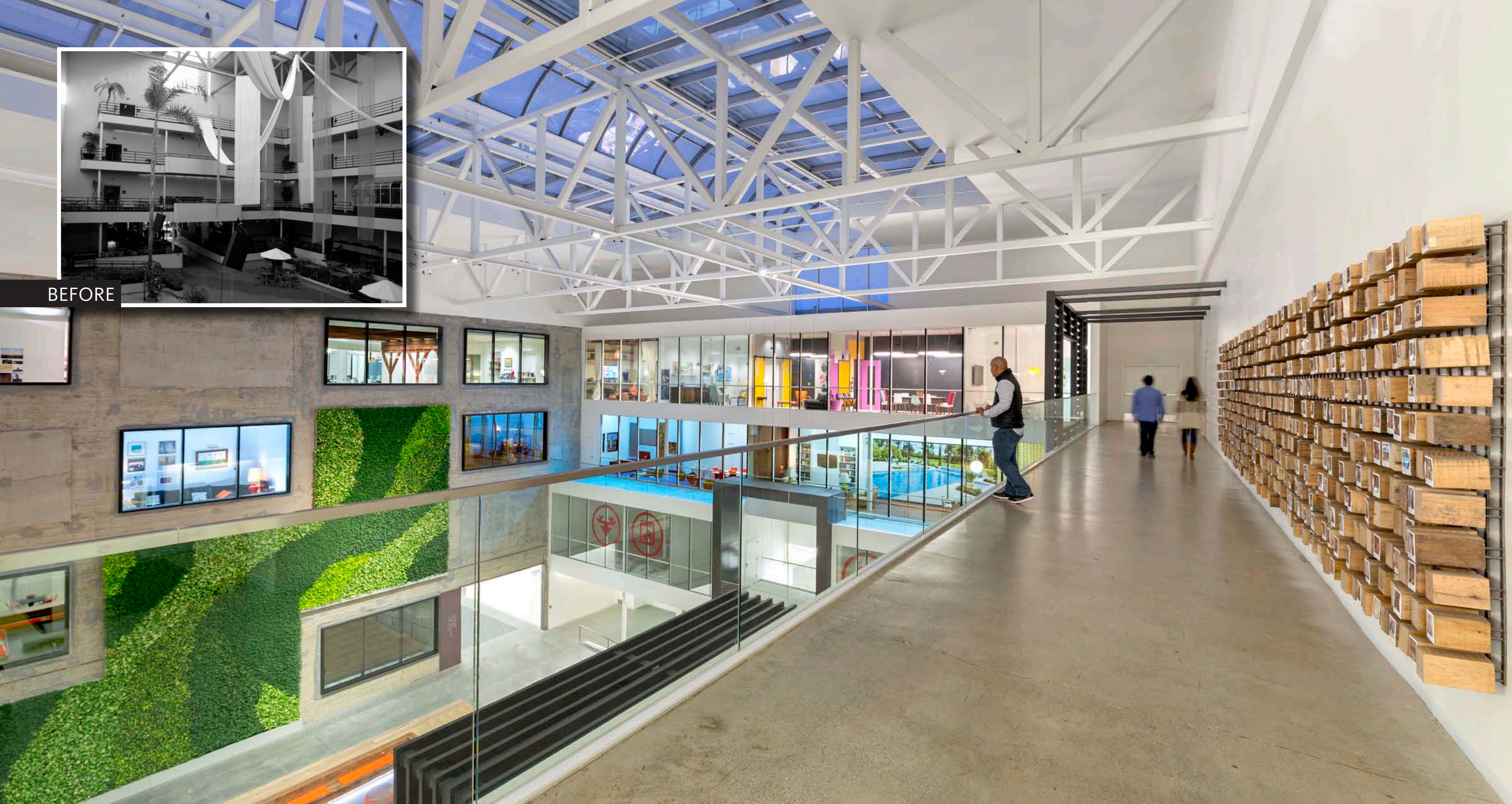
BEFORE







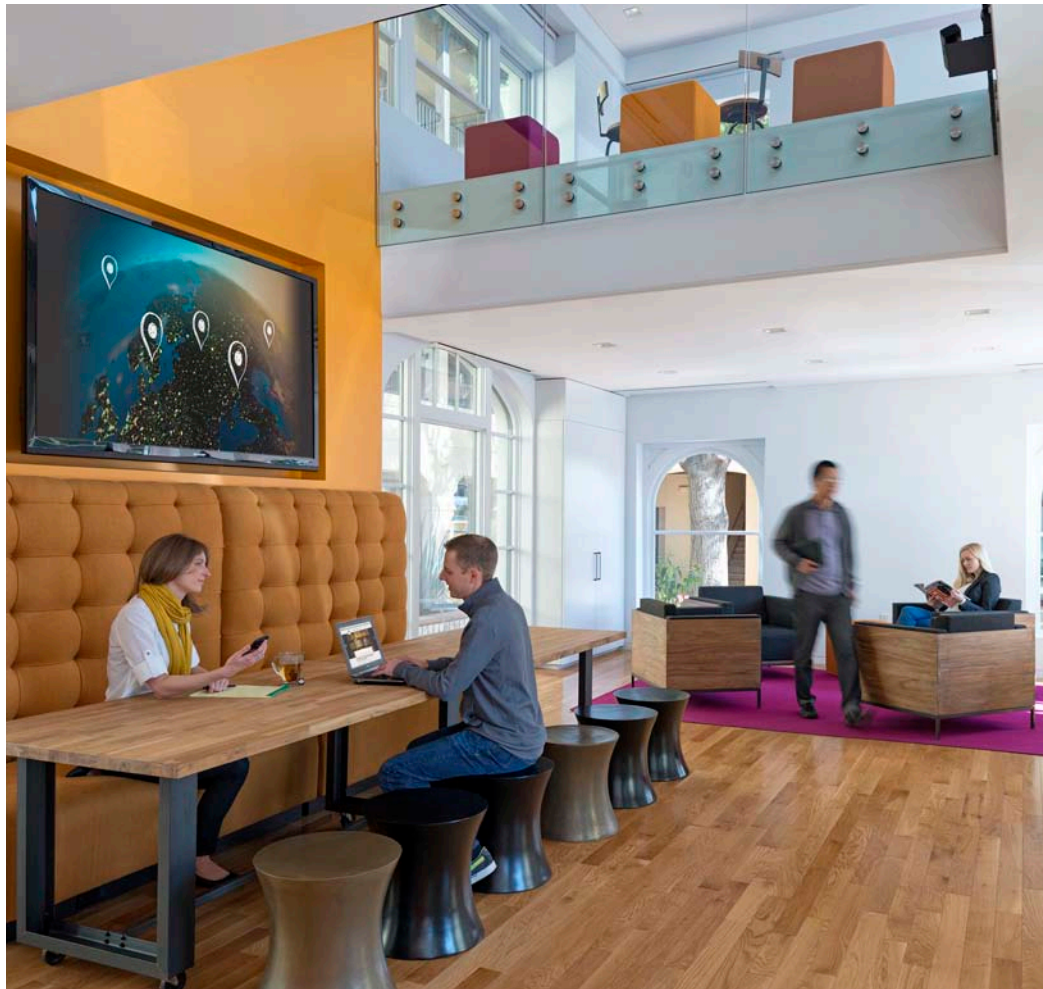
BEFORE





Unhealthy Workplace Costs

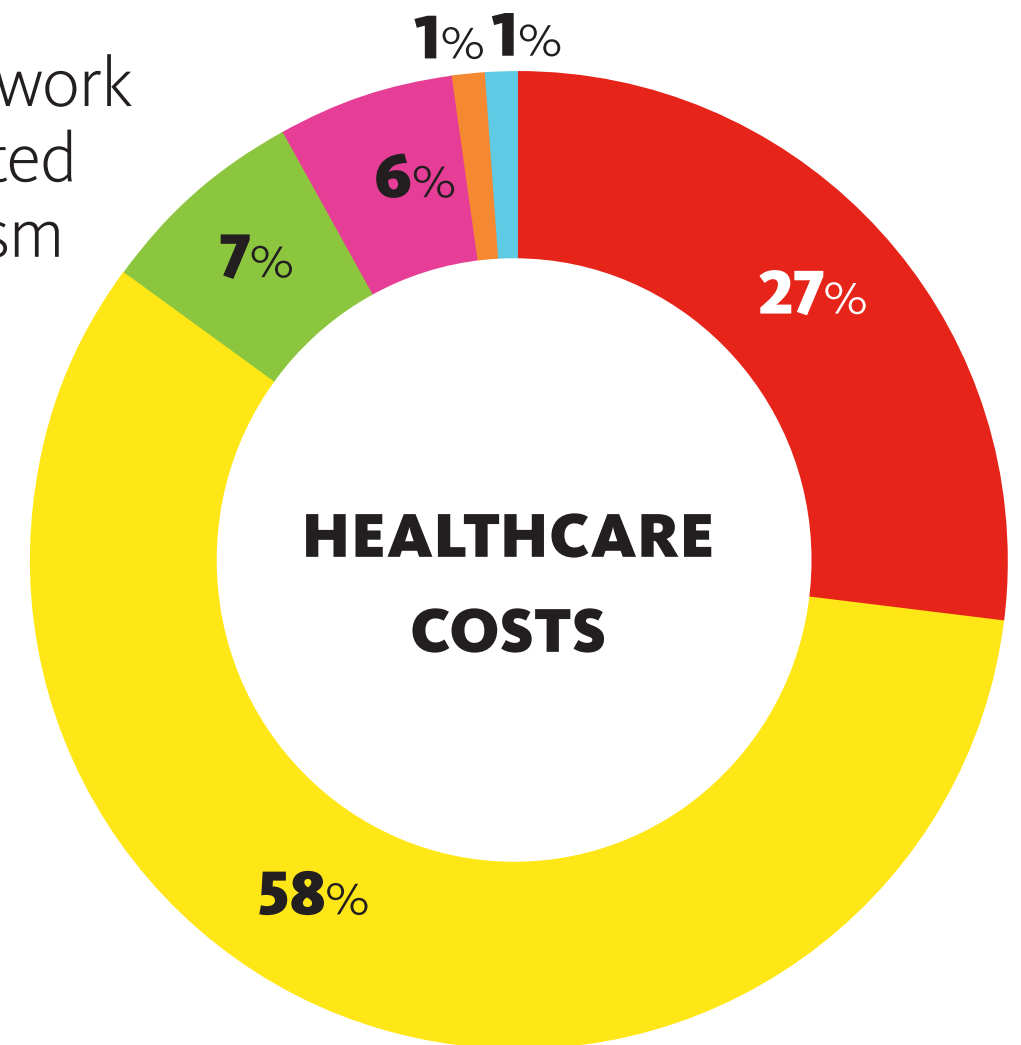
Operational Costs



\$4,600

Employer productivity per work per year lost to health-related absenteeism or presenteeism

- **Medical**
- **Absenteeism**
- **Presenteeism**
- Short-term disability
- Long-term disability
- Workers Compensation



Healthy Workplace Strategies

Sick Building Syndrome (SBS)

30%

Of new and remodeled buildings worldwide are subject of excessive complaints related to indoor air quality (IAQ) causing health and comfort issues for occupants.

BUILDING RELATED ILLNESS (BRI) CAUSES



- VOCs (cleaning products)
- Non-HEPA Vacuum
- Particulates
- Carbon Dioxide Build Up
- Temperature Extremes
- Pesticides
- Computers
- Allergens
- Odors
- Contaminated Air
- Pollen
- Improper Filtration
- Lead
- Mold / Bacteria
- Asbestos
- Water Leaks
- Fiberglass Insulation
- Carpet Fibers
- Sewage
- Furniture
- Improperly Sealed Concrete
- Perfume / Cologne
- Transmittable Disease
- Excessive Exhaust

Healthy Workplace Strategies

Design / Planning

- Collaborative and focus space
- Healthy food front and center
- Prominent stairs

Places for Activity

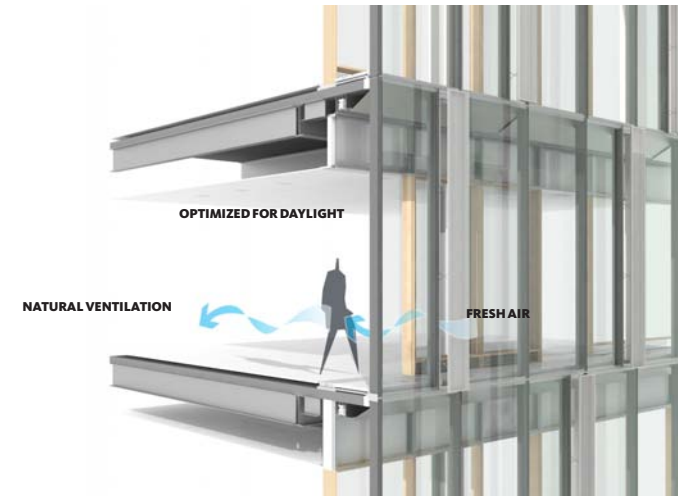
- Amenities for well-being
- Active / Walking meetings
- Active / Adjustable desks

Environmental Quality

- Natural lighting
- Air quality
- Acoustics
- Temperature and comfort

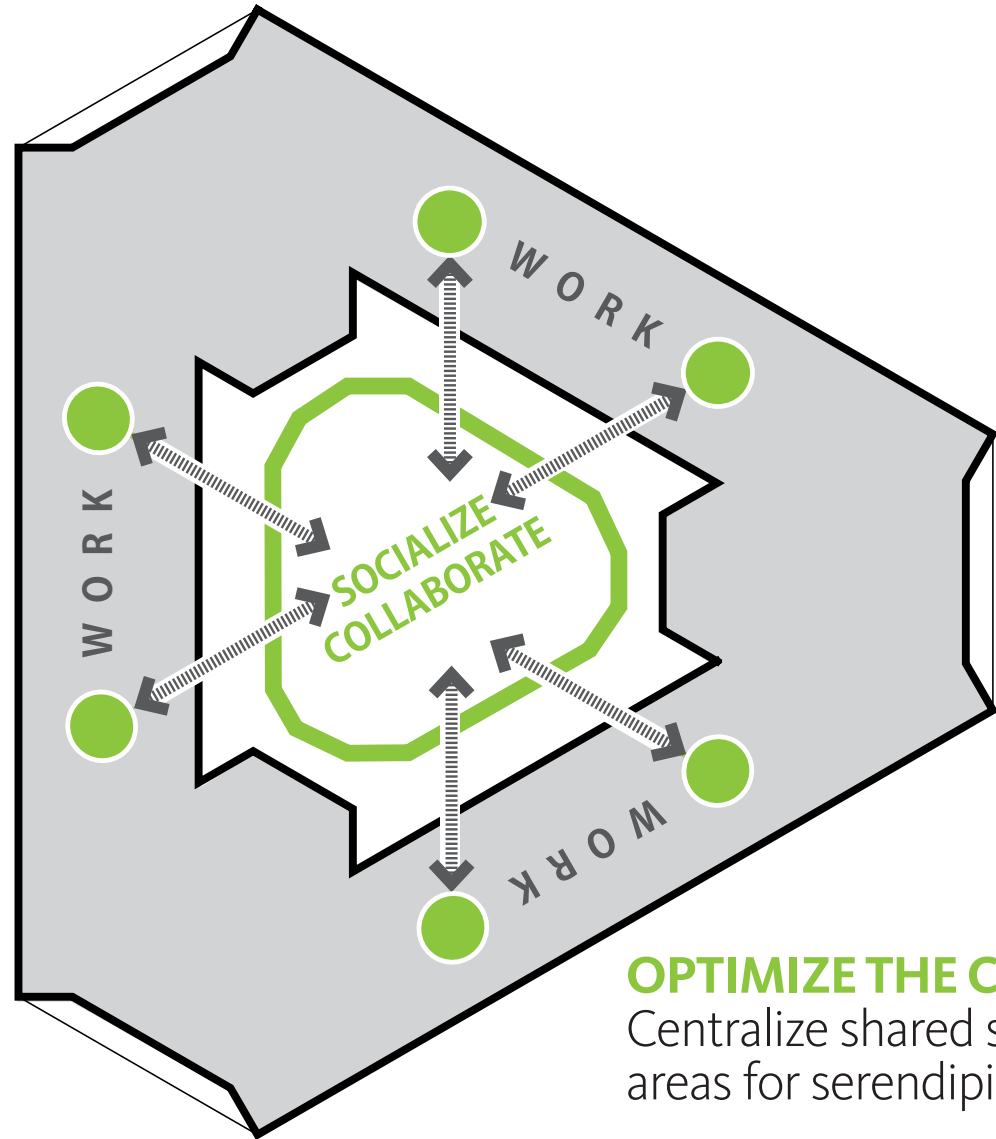
Organizational Policies

- Fitness and health incentives
- Real-time feedback
- Reward work-life balance

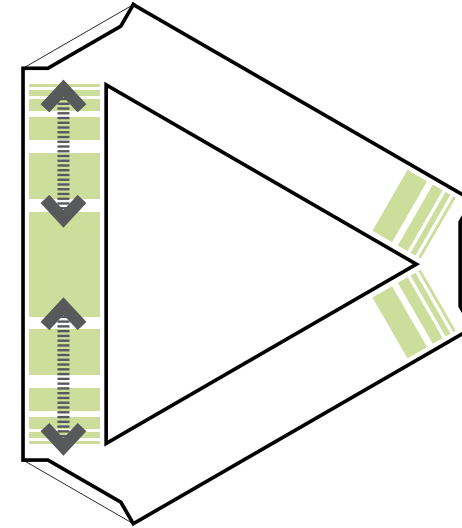




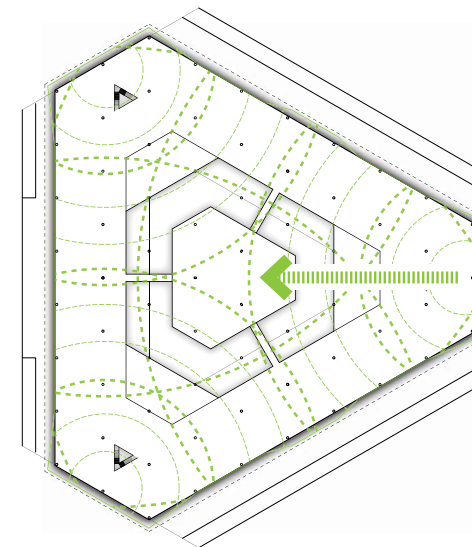
GIVING THE BUILDING A HEART



OPTIMIZE THE CONNECTIONS
Centralize shared spaces and create areas for serendipitous interactions



FLEXIBLE NEIGHBORHOODS
Flexible work zones absorb growth and surge

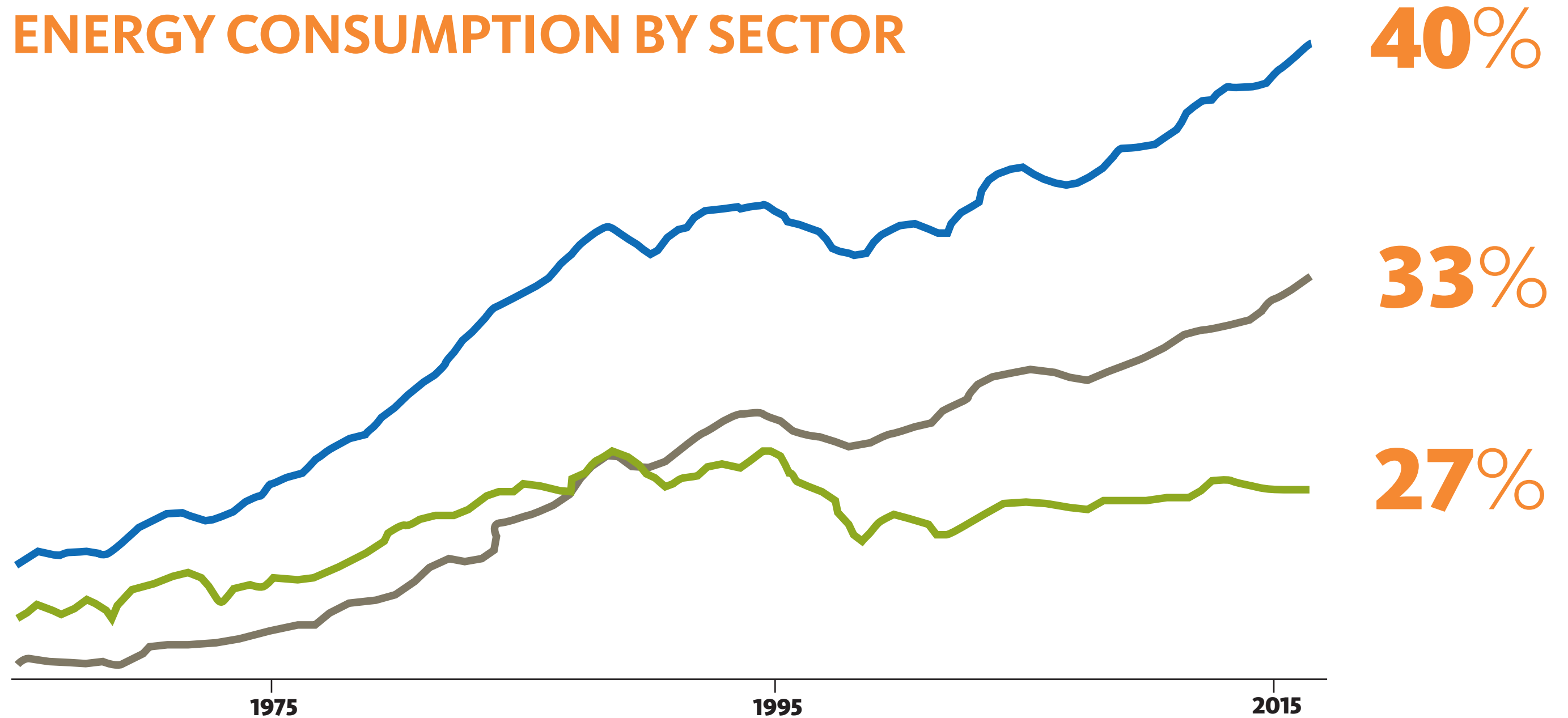


1 MINUTE WALK

PROXIMITY
Research shows that visual connectivity is necessary for effective collaboration

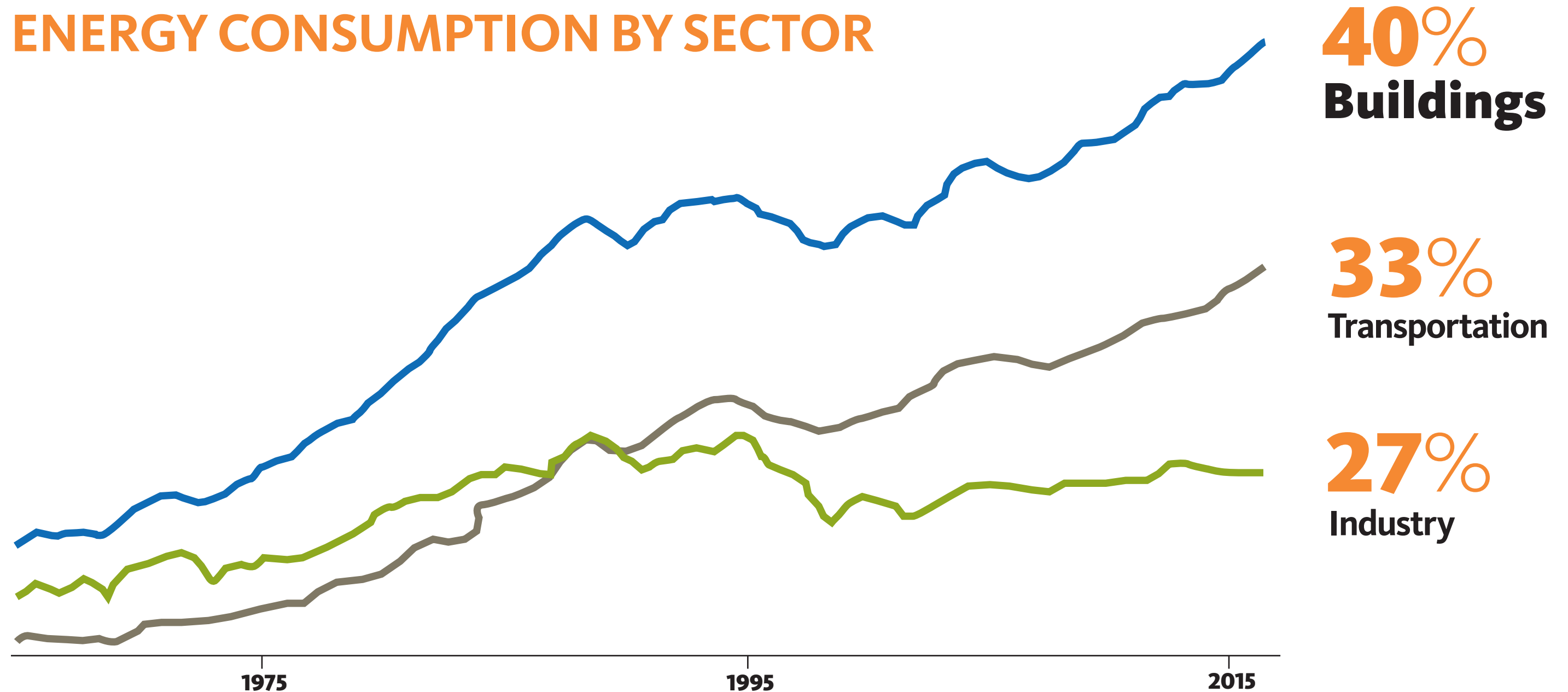
Designing Healthy Places

ENERGY CONSUMPTION BY SECTOR



Designing Healthy Places

ENERGY CONSUMPTION BY SECTOR





“As the substantial return on investment (ROI) is confirmed, we see that well-being will be a significant part of the marketplace moving forward...”

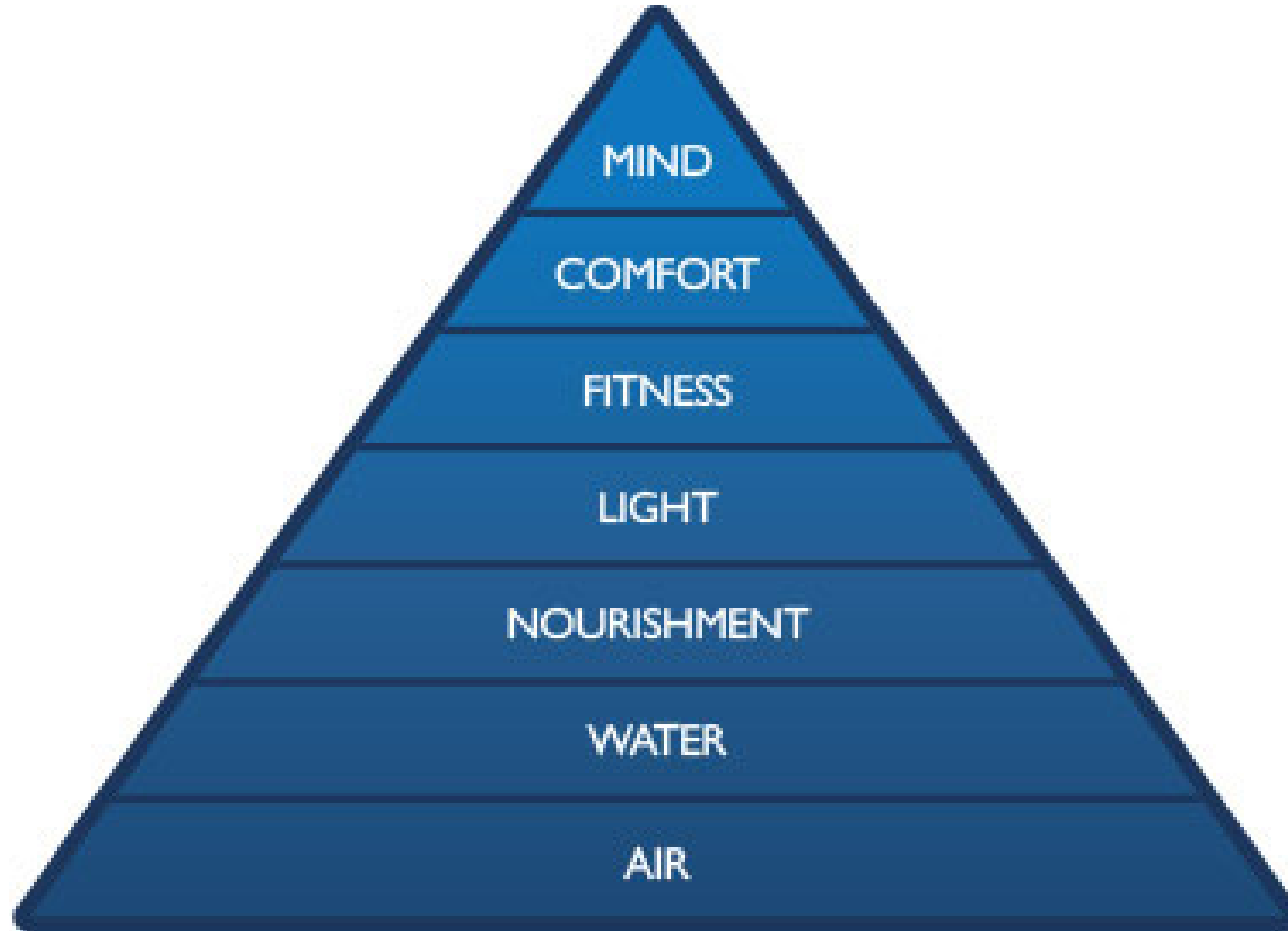
LEWIS C. HORNE

President

CBRE, Los Angeles, CA



Healthy Workplace Strategies









BEFORE





Liveable Cities

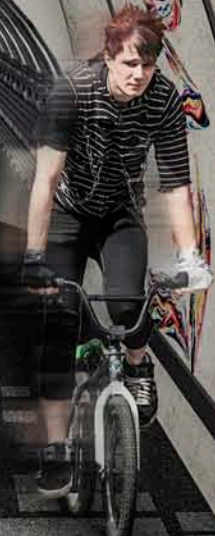


-  DISUSED STATION
-  EXISTING STATION
-  UNDERLINE TUNNEL
-  OVERGROUND WALKWAY

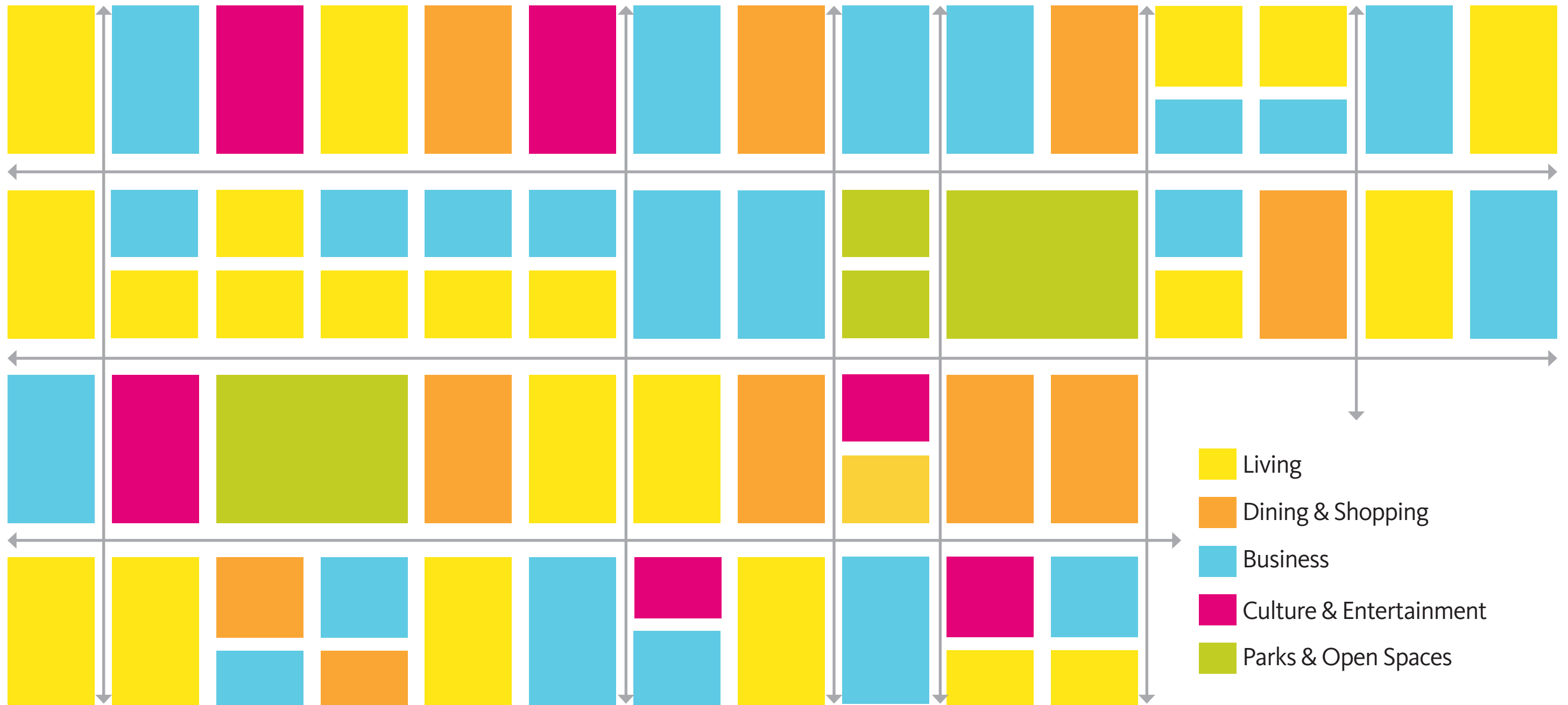
Liveable Cities



PAVEGEN ENERGY-HARVESTING TILES



Amenities and Dynamic Cities





SHANGHAI TOWER PUDONG, SHANGHAI, CHINA

632M



ZONE 9

Observation /
Cultural facilities

ZONE 8

Hotel / Boutique
office

ZONE 7

Hotel

ZONE 6

Office

ZONE 5

Office

ZONE 4

Office

ZONE 3

Office

ZONE 2

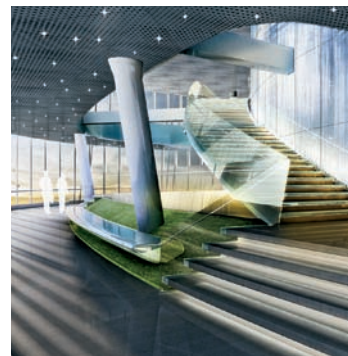
Office

ZONE 1

Retail

A VERTICAL CITY

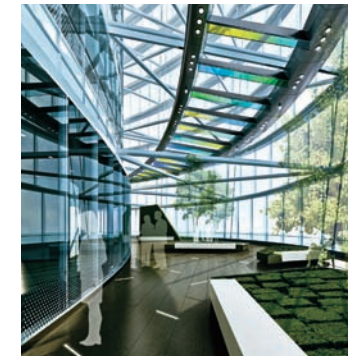
Shanghai Tower is a **city within a city** comprising nine vertical zones, each 12 to 15 stories high. Each zone is encircled by public space within the double-skin façade.



Observation level



Offices



Sky lobbies



Retail podium



Ground-floor lobbies



SHANGHAI TOWER PUDONG, SHANGHAI, CHINA

HEALTHY DESIGN MATTERS

PUTTING BEST ENVIRONMENTAL PRACTICES IN VIEW

Healthy building design is at the core of Shanghai Tower's development.

GREEN STRATEGIES

Shanghai Tower will achieve both LEED Gold certification and a China Green Building Three Star rating.

Shanghai Tower's sustainable strategies will reduce the building's carbon footprint by

34^k
METRIC TONS
PER YEAR

DAYLIGHTING

The glass skin admits maximum daylight, reducing the need for electric lighting.



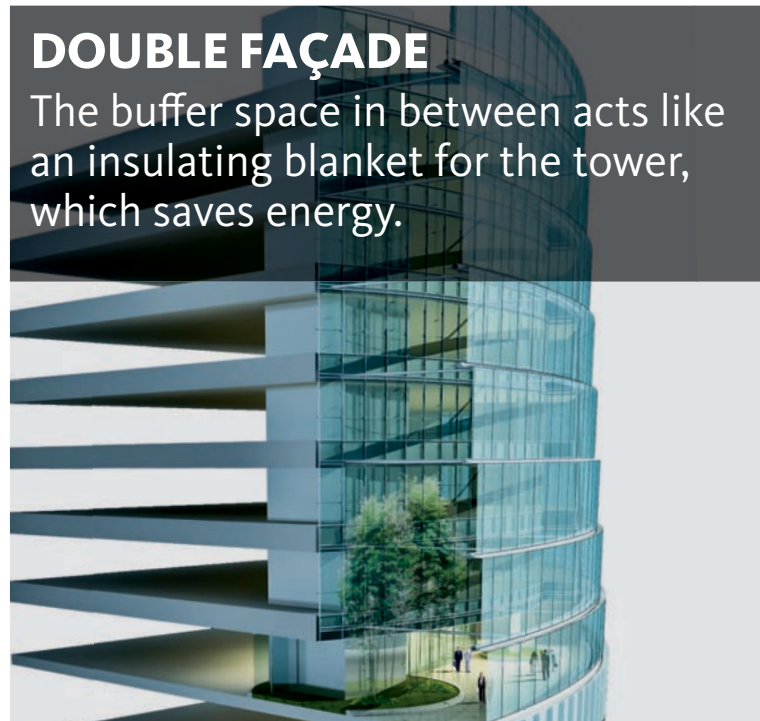
LANDSCAPING

One-third of the site is green space, with extensive landscaping that cools the grounds.



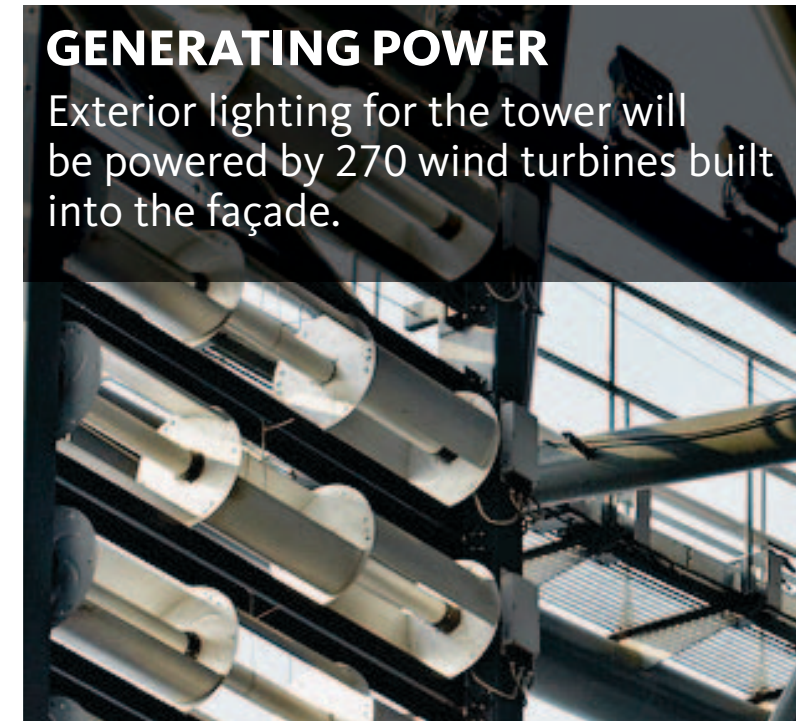
DOUBLE FAÇADE

The buffer space in between acts like an insulating blanket for the tower, which saves energy.



GENERATING POWER

Exterior lighting for the tower will be powered by 270 wind turbines built into the façade.





INTELLIGENT SKIN

Double skin acts as an insulating blanket, keeping the sun's heat out in the summer and the building's heat in the Winter, at the same time letting the maximum amount of light in to reduce the need for artificial lighting in the day.

Wall Type: **A** **B**

