

edilportale[®]

TOUR 2017

Ristrutturazione, riqualificazione
energetica, comfort abitativo,
adeguamento antisismico, BIM



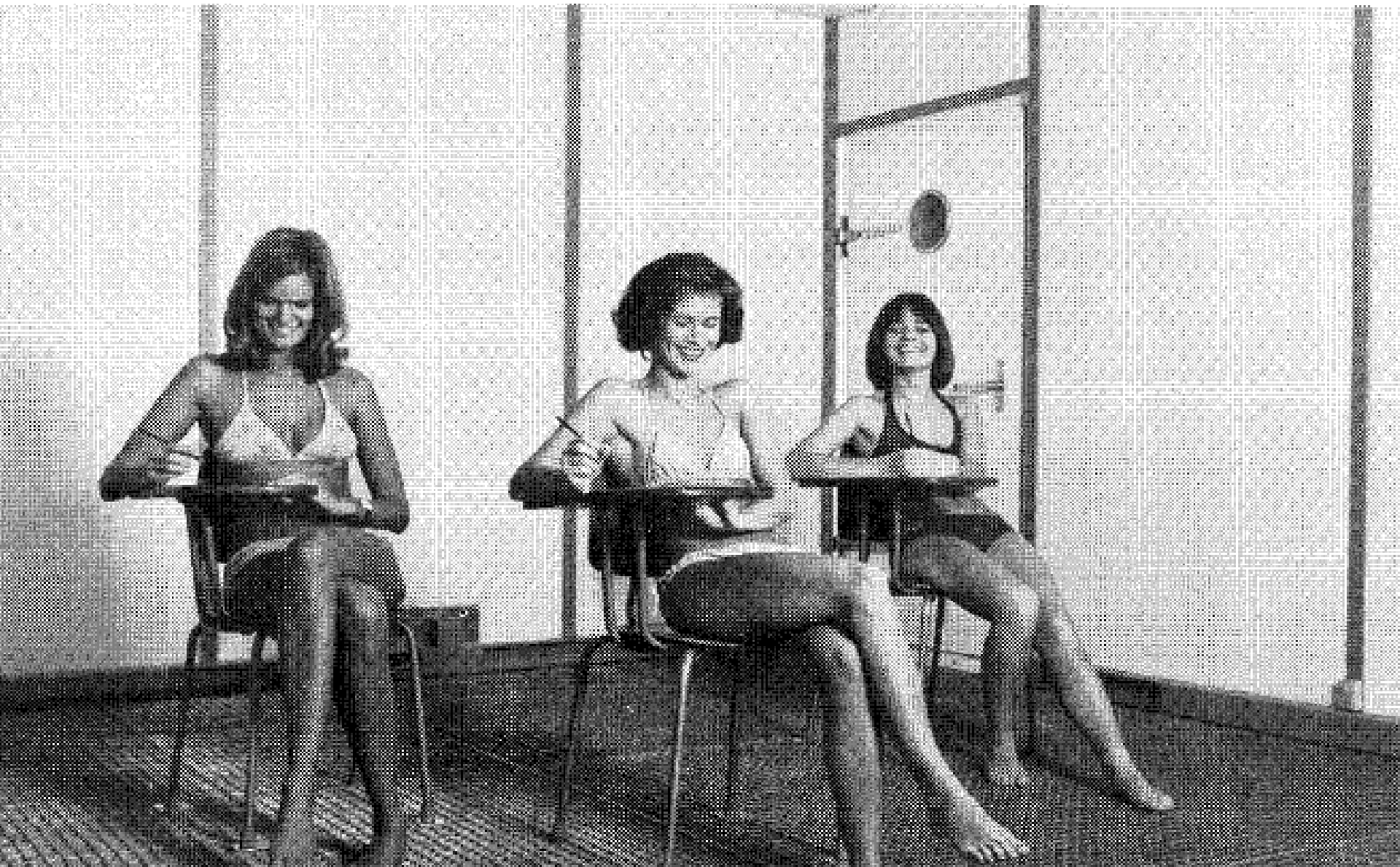
Roofingreen

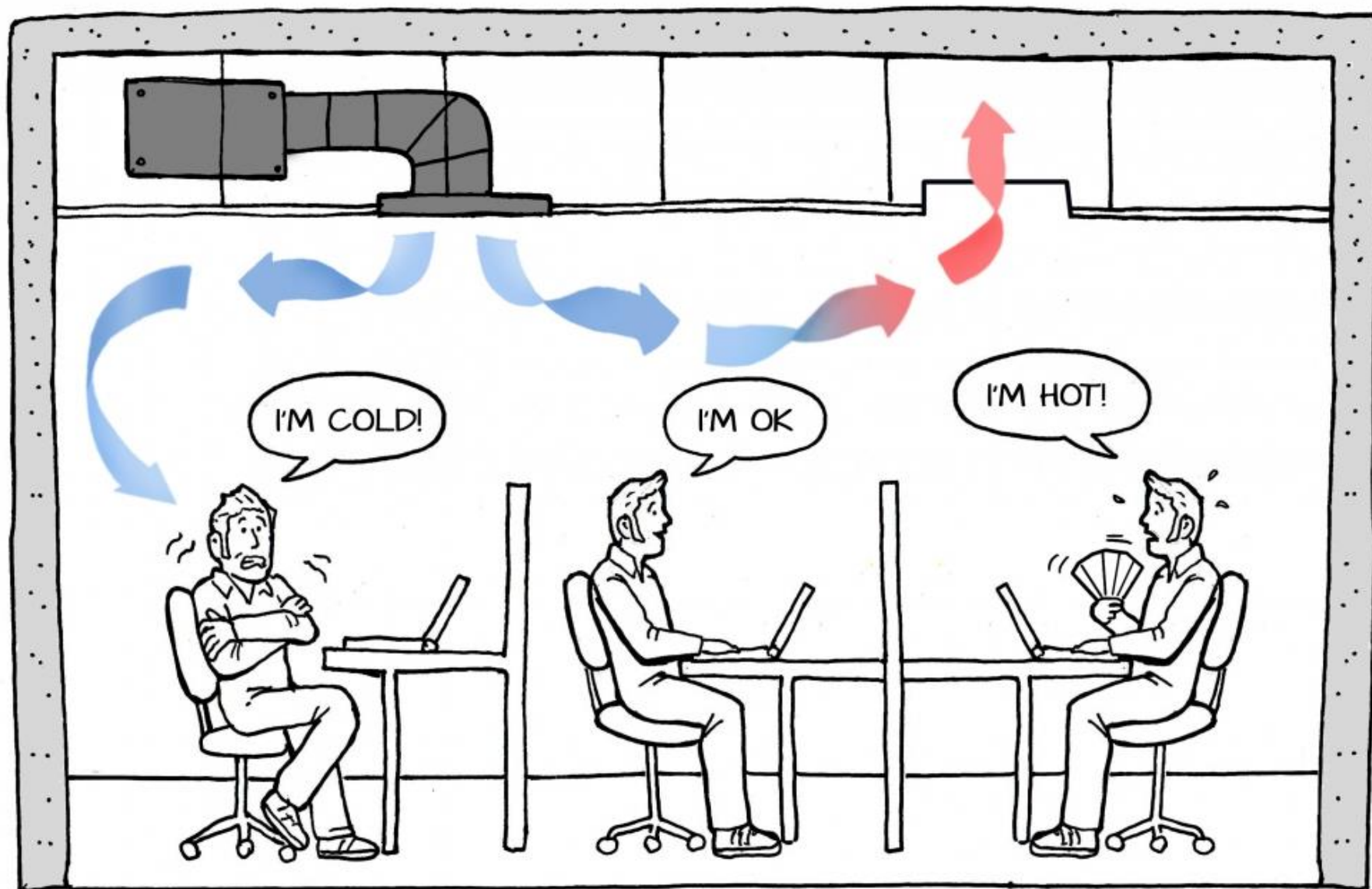


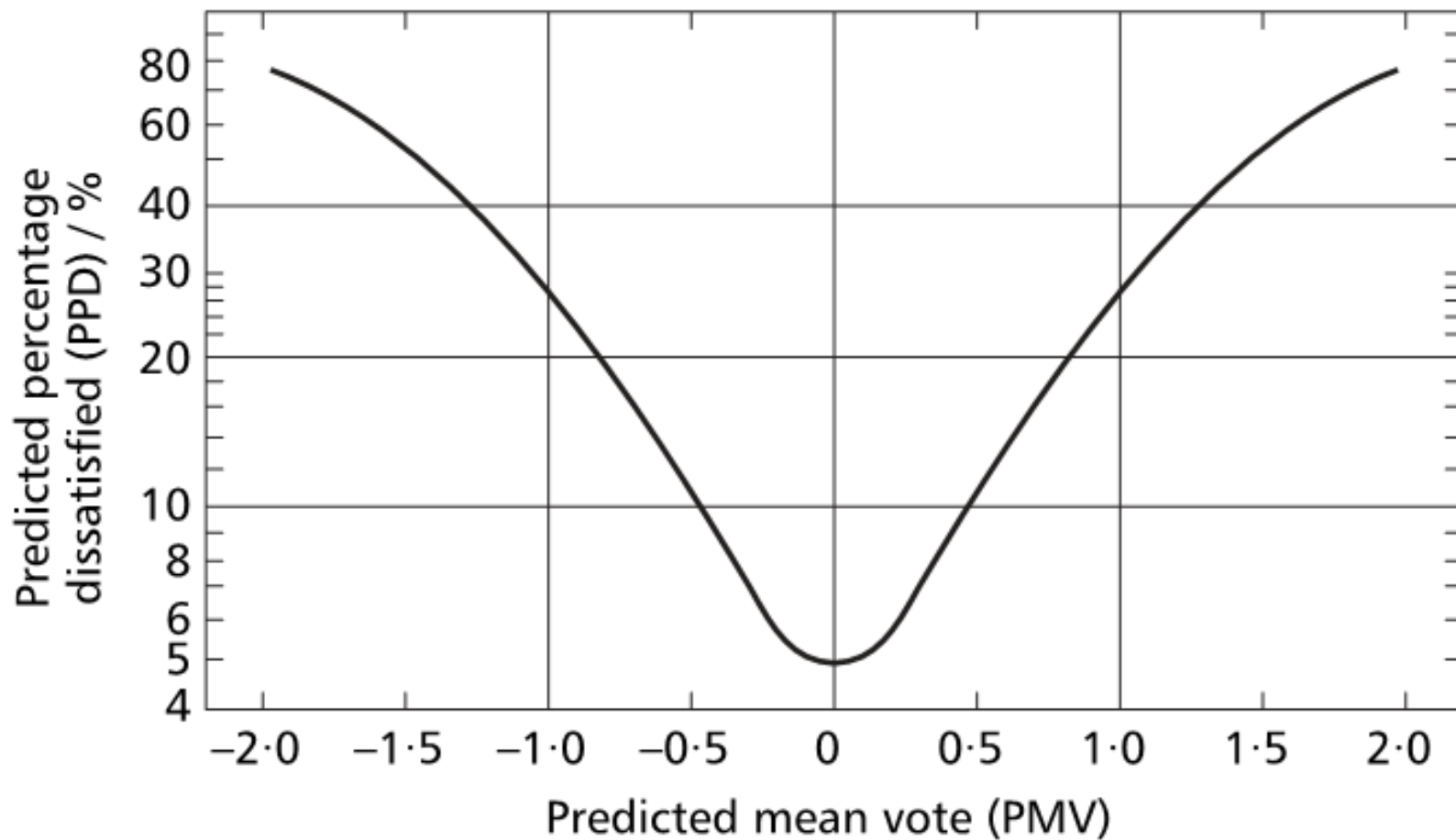
Verona, 8 Giugno 2017

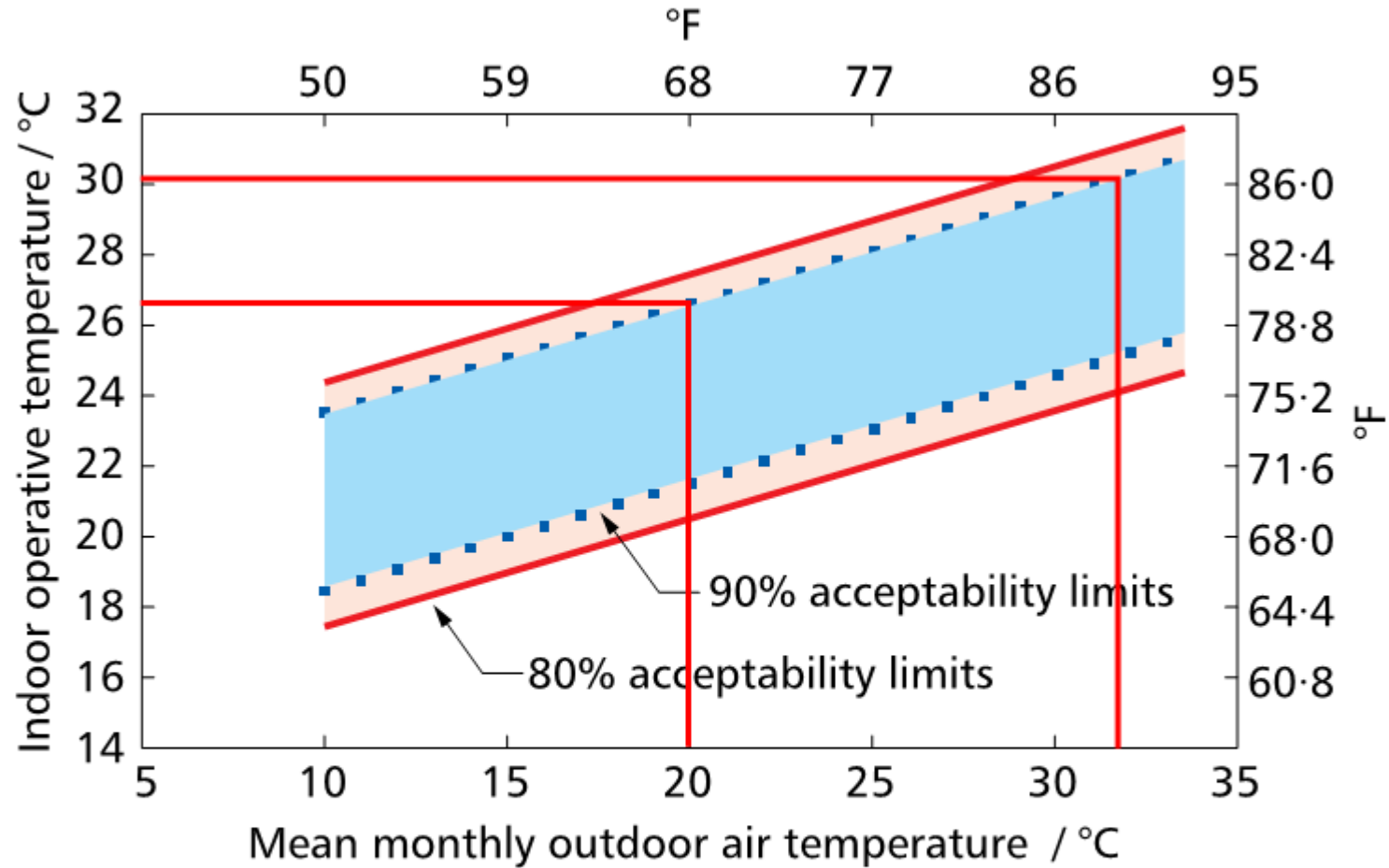
Designing for People - Progettare per il Benessere

Paolo Cresci - ARUP



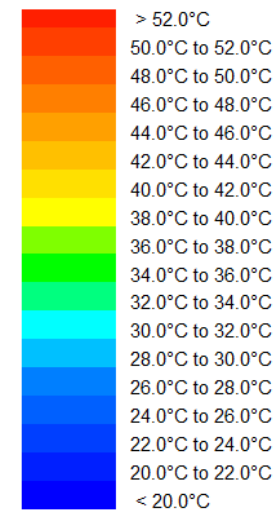
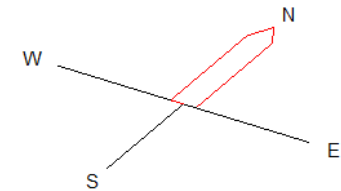
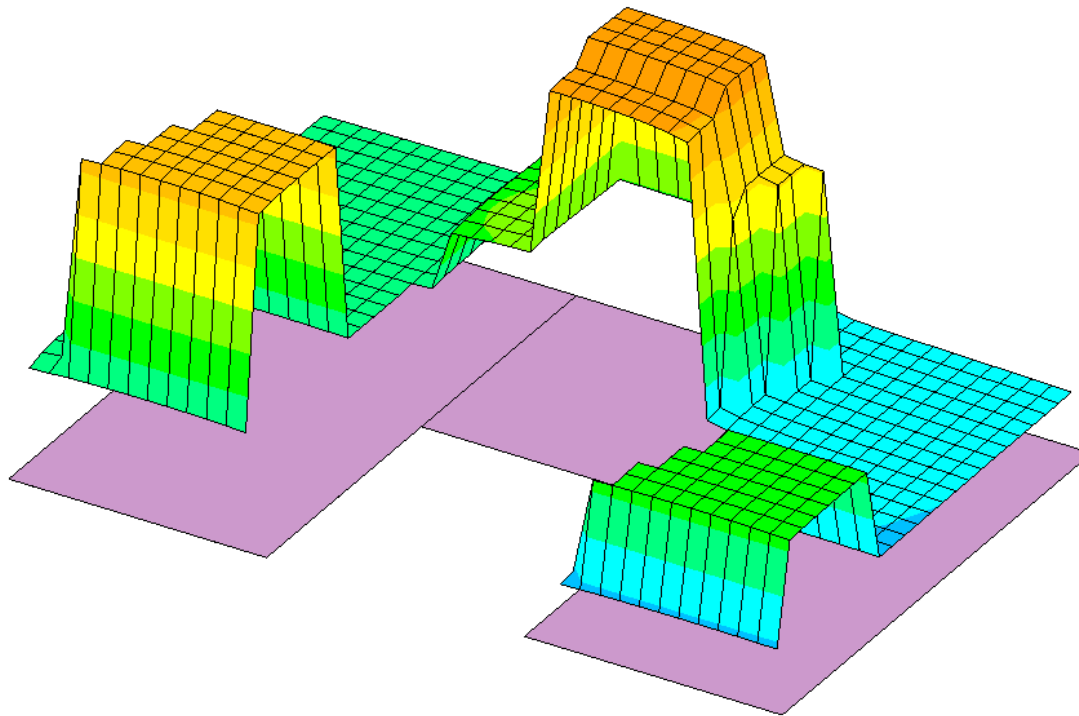


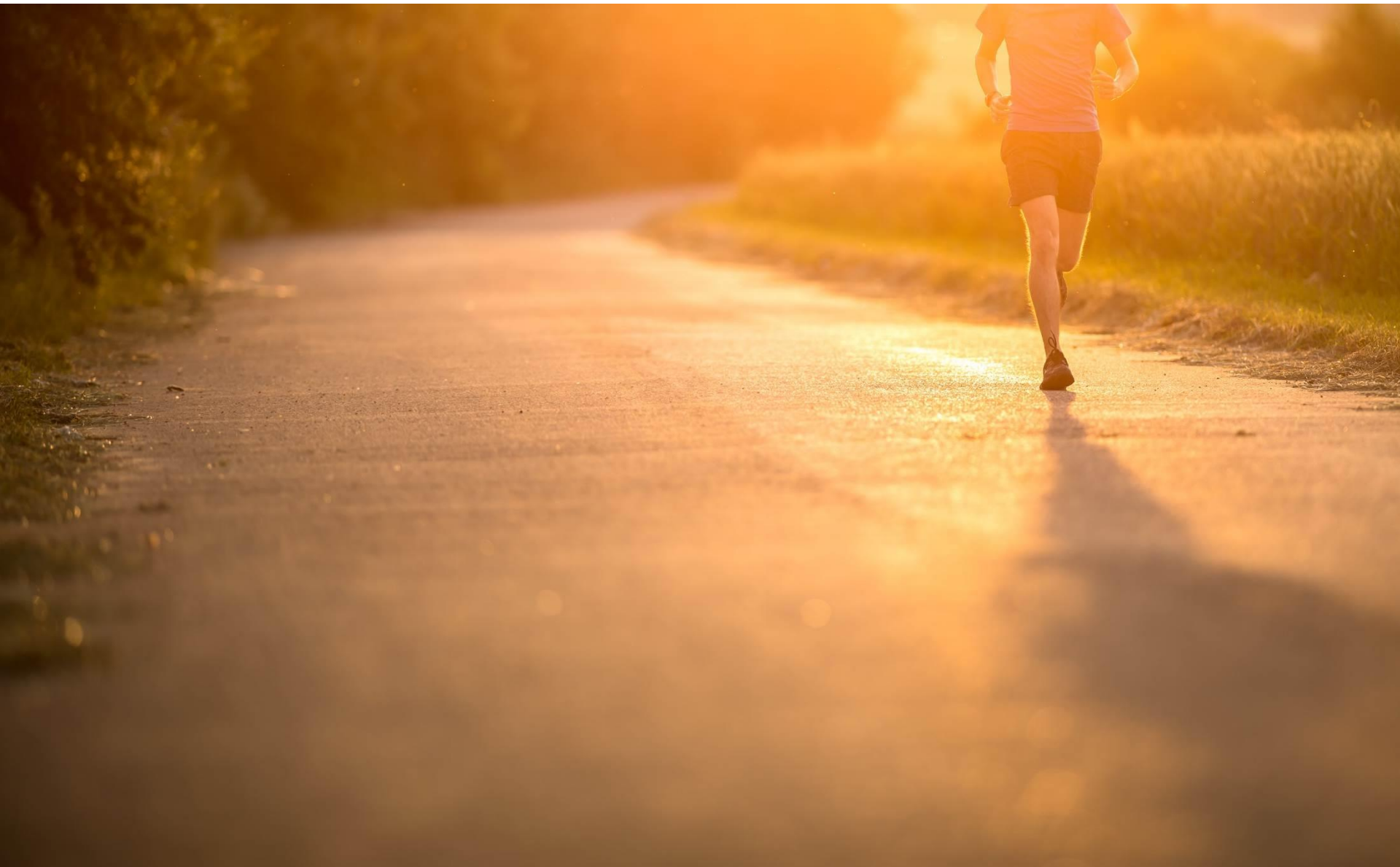




Acceptable Operative temperatures for naturally ventilated buildings (ASHRAE 2010)

Temperature in July at 13:00 hours
Minimum: 29.6°C Maximum: 45.3°C
Room (Analysis Plane at z = 0.00 m)





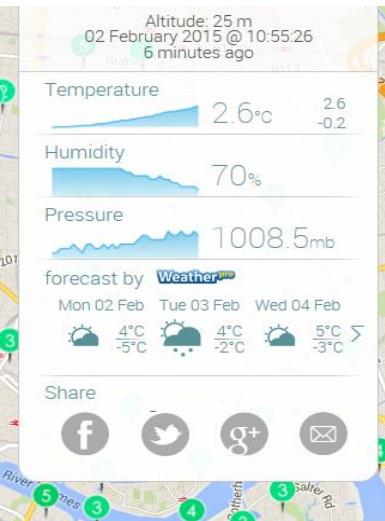
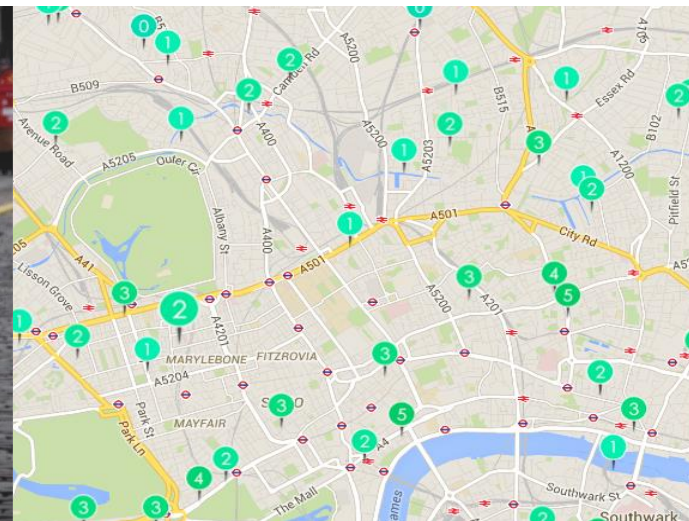
We spend 90%
of our time *indoors*.



DECLINING HEALTH
AGEING POPULATION

TRENDS AND
RISK FACTORS

INFORMED OCCUPANTS
PUBLIC DATA DISCLOSURE



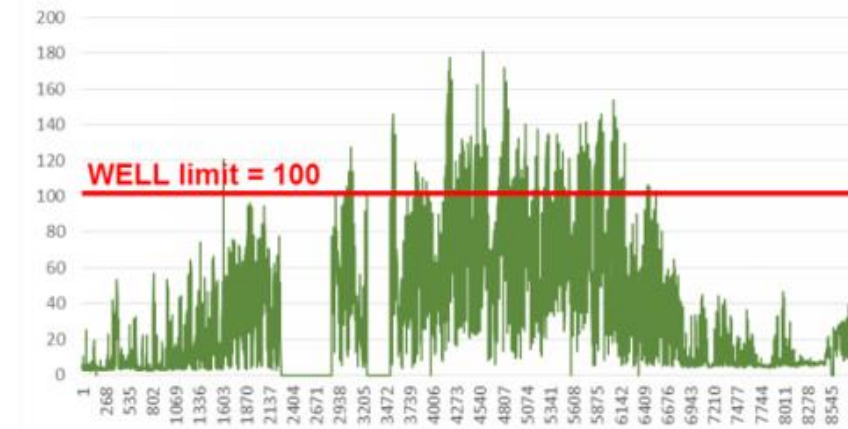
PM10 2016 daily values measured at the weather station in Milano Verziere



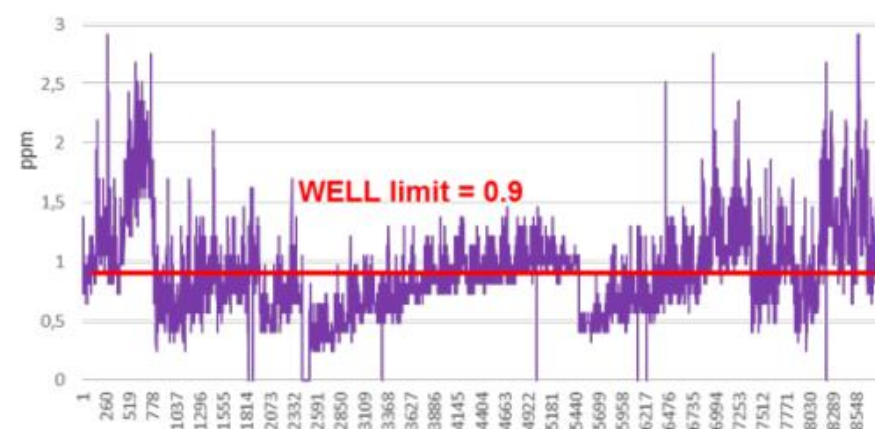
PM2.5 2016 daily values measured at the weather station in Milano Verziere

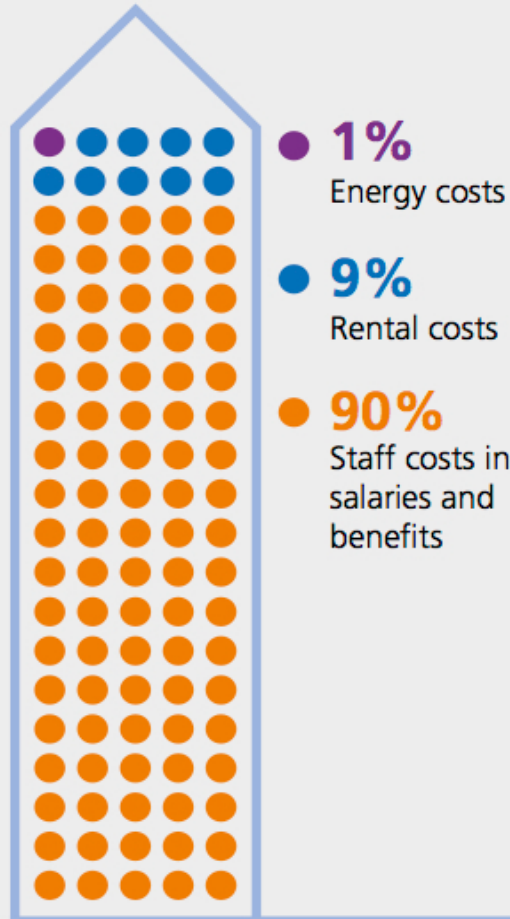


O₃ 2016 hourly values measured at the weather station in Milano Verziere



CO 2016 hourly values measured at the weather station in Milano Senato





Based on a typical split of business operating costs, modest gains in staff health and wellbeing can deliver significant financial savings.

[Source: WGBC report on Health, Wellbeing and Productivity in Offices, 2014]



BUILDING HEALTHY PLACES
TOOLKIT



STRATEGIES FOR **ENHANCING HEALTH**
IN THE **BUILT ENVIRONMENT**

ULI Urban Land Institute
Building Healthy Places Initiative



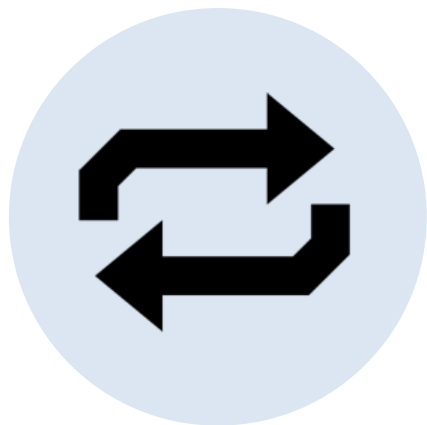
ACTIVE DESIGN GUIDELINES

PROMOTING PHYSICAL ACTIVITY AND HEALTH IN DESIGN



THE **WELL**
BUILDING STANDARD®
v1 September 2015

Health, Wellbeing & Productivity in Offices
The next chapter for green building



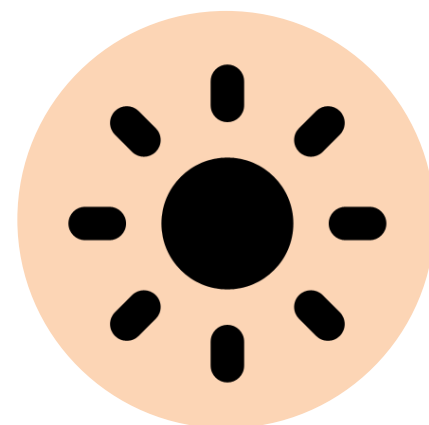
AIR



WATER



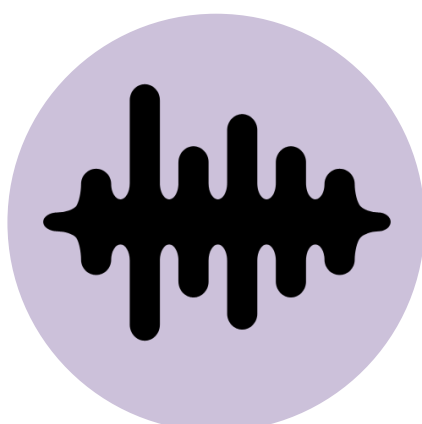
NOURISHMENT



LIGHT



FITNESS

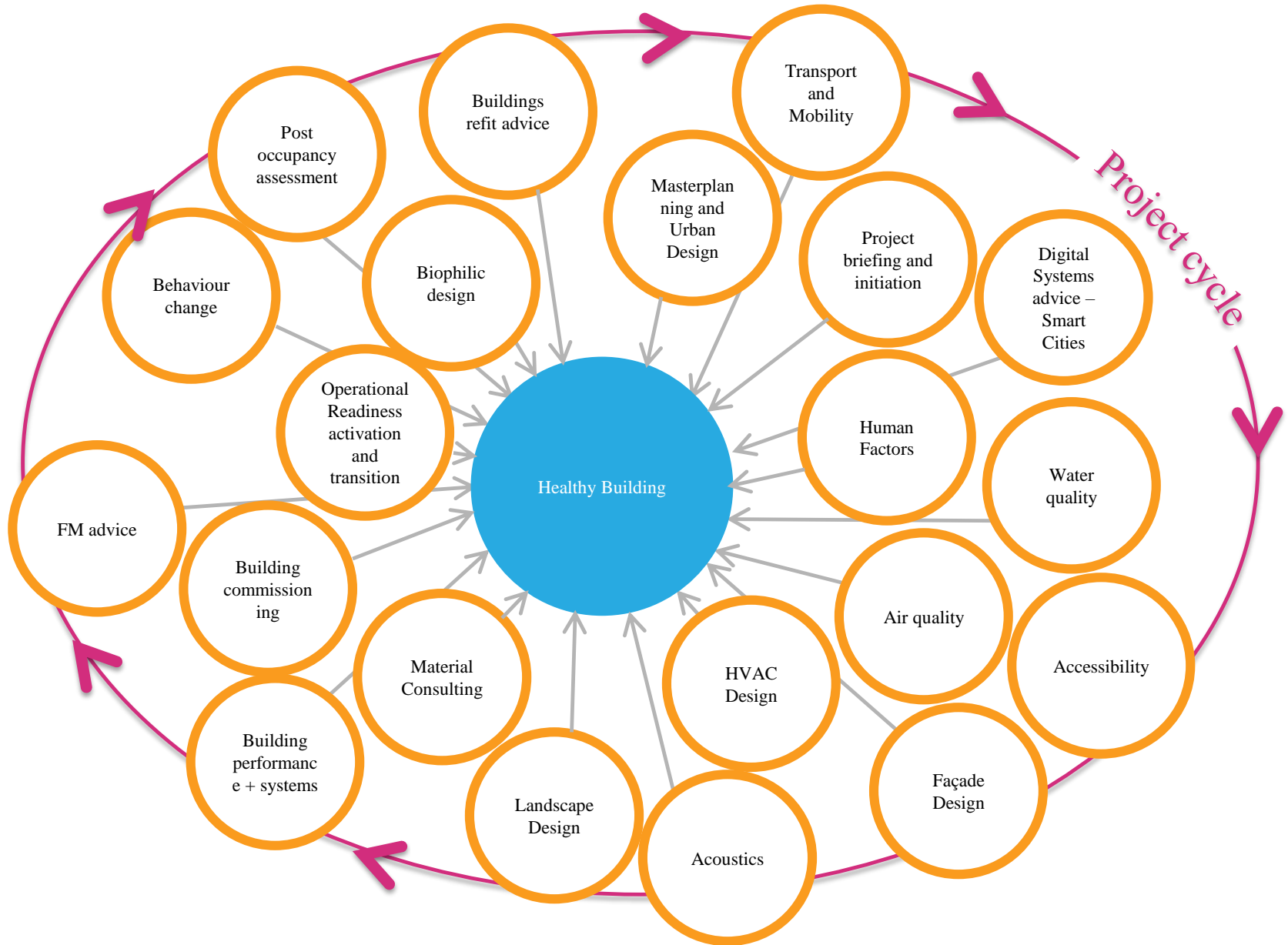


COMFORT



MIND





THE WELL DIFFERENTIATOR

Data Driven Environmental Assessments Through Onsite

PERFORMANCE VERIFICATION

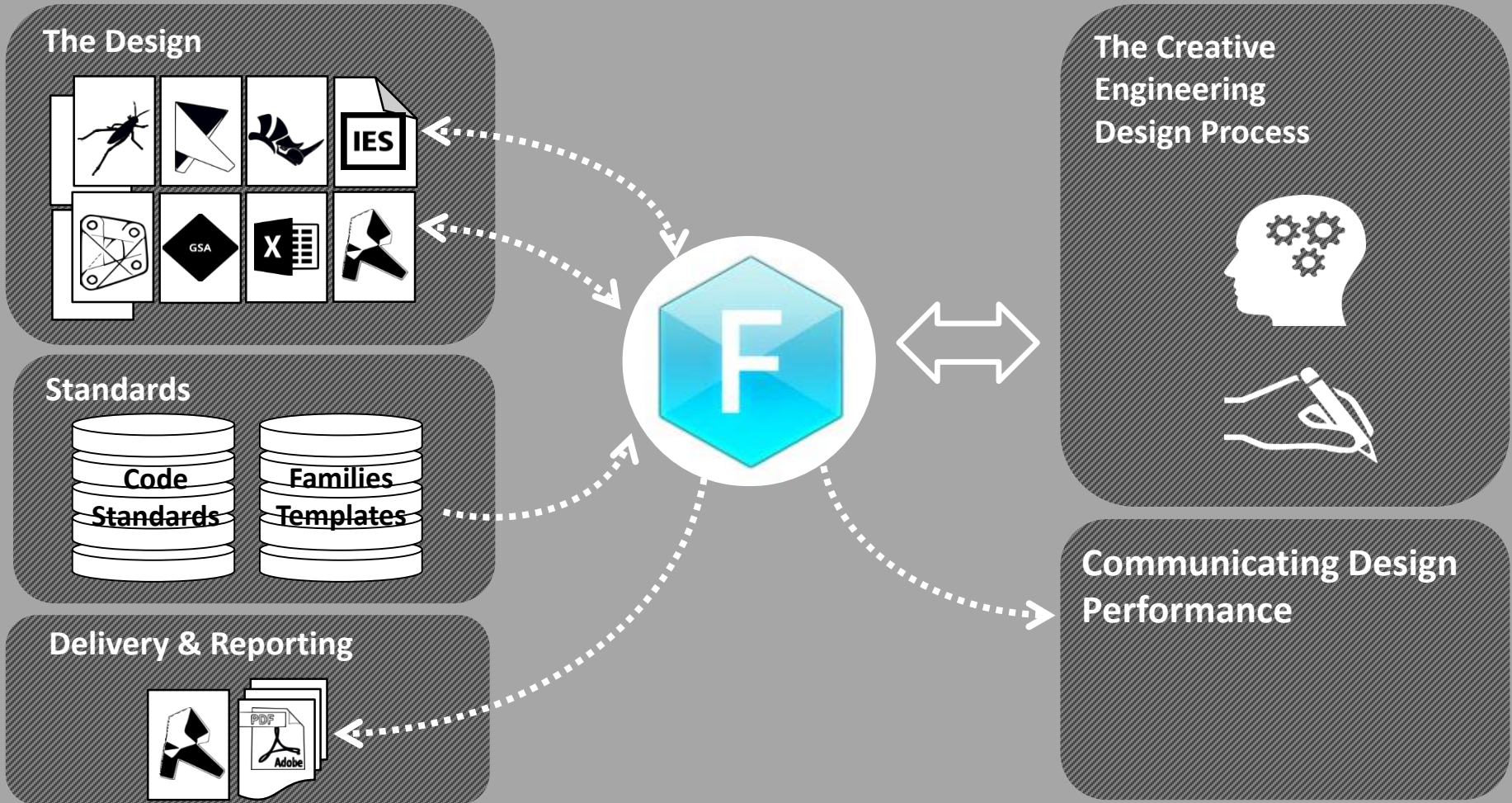
Data exchange and collaboration platform

FLUX SUSTAINABLE
ARCHITECTURE
@SCALE



**YOUR DESIGN
TOOLS, WORKING
TOGETHER**

Use Flux to exchange data
between Excel, Grasshopper,
Dynamo, and more via the Web.





WELL GREEN

IWBI



GBCI



GREEN BUSINESS®
CERTIFICATION INC.

Ensuring that certification for **WELL**
and **LEED** works seamlessly.