



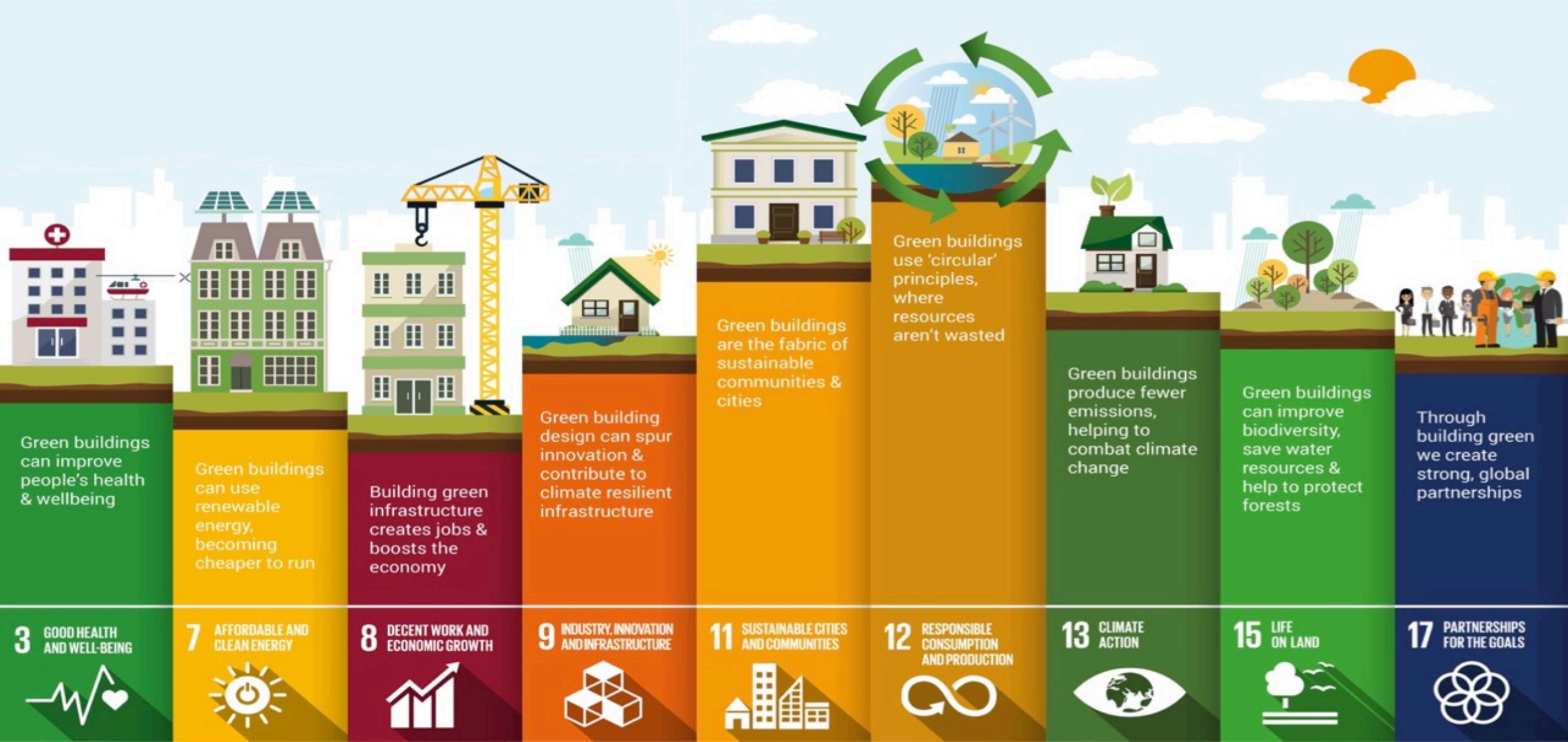
WORLD
GREEN
BUILDING
COUNCIL

European Trends in Sustainable Buildings
Grænni Byggð Conference, 11 April 2019



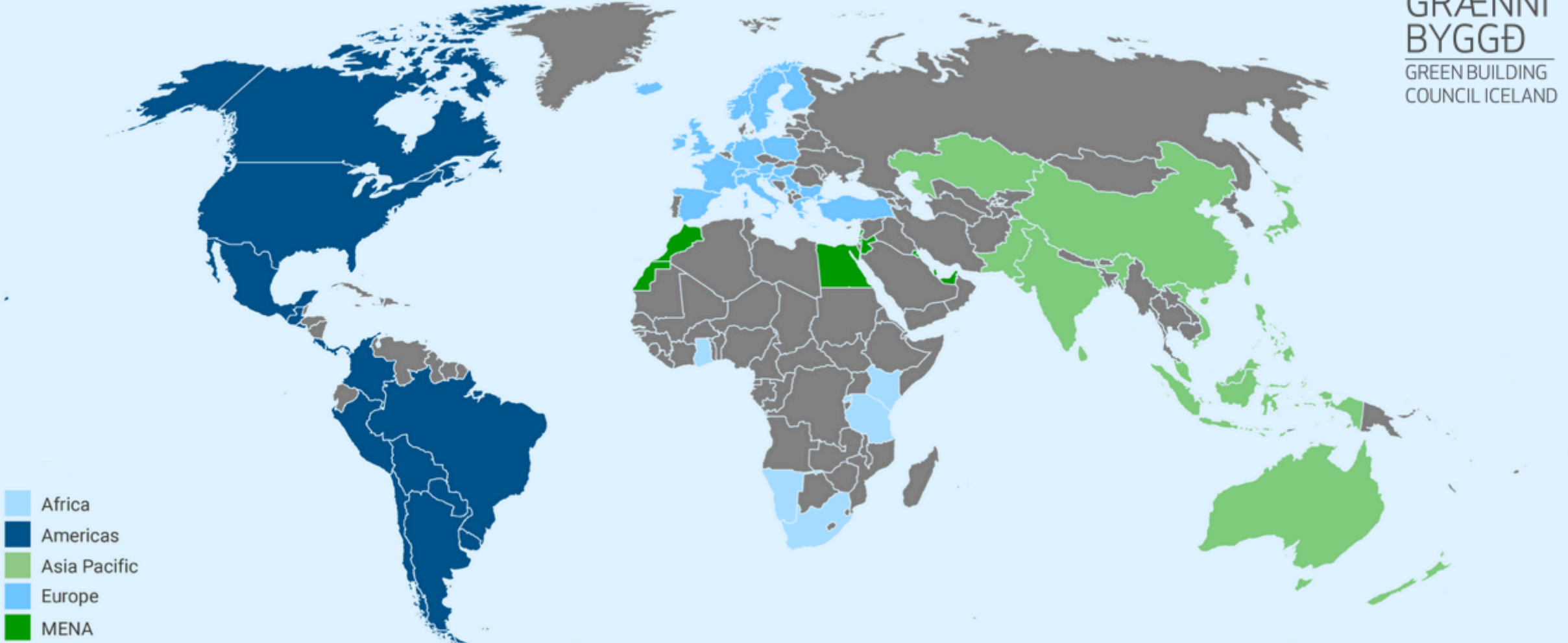
GRÆNNI
BYGGÐ
GREEN BUILDING
COUNCIL ICELAND

Our sector has a unique role to play



World Green Building Council

A global network of Green Building Councils creating green buildings for everyone, everywhere. Uniting nearly 70 countries and 37,000 members.





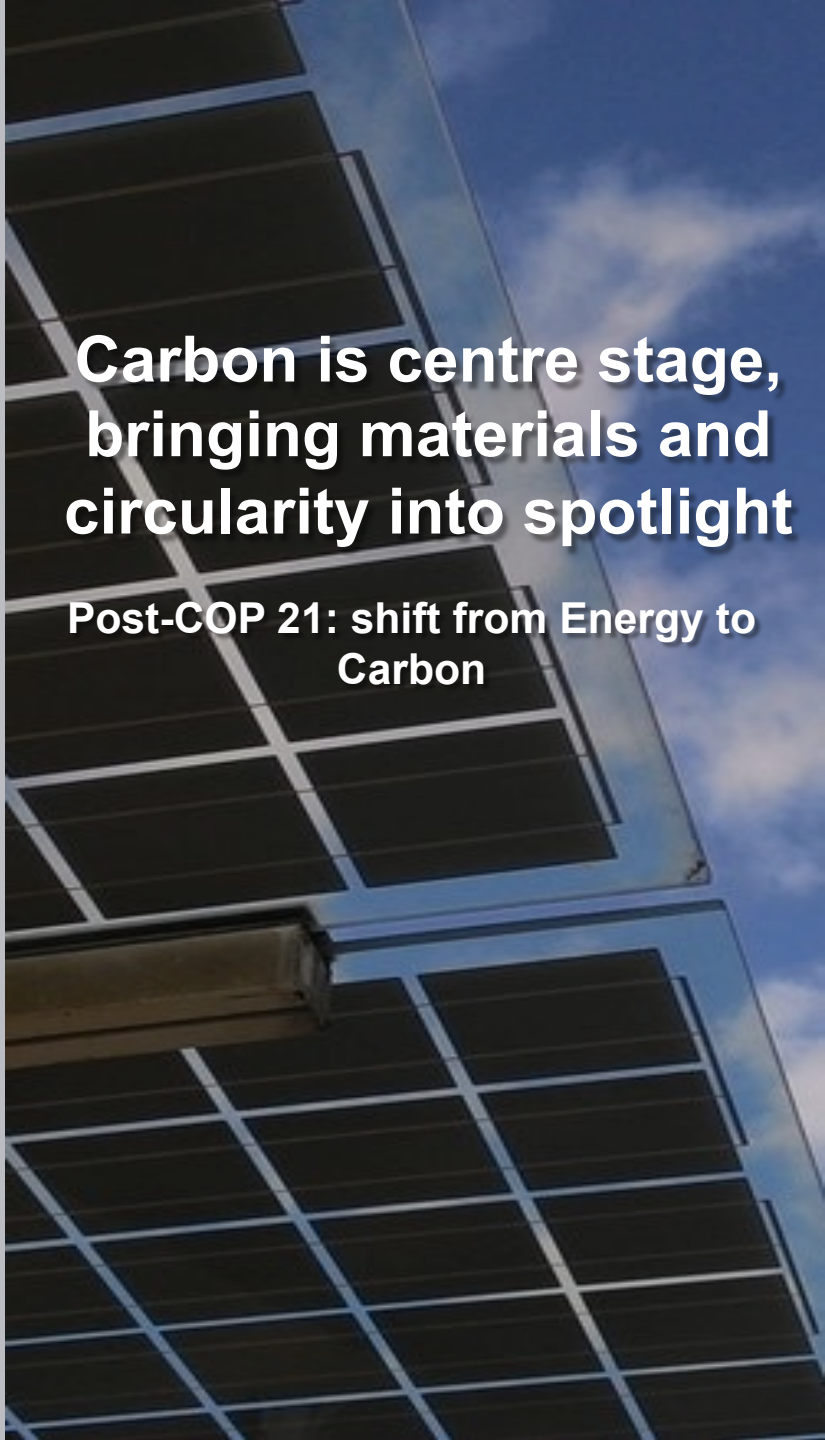
Health & wellbeing are a major demand driver

Mindfulness, personal productivity, “next trillion dollar industry”



Investors want to be part of the solution

Real estate at \$223T is the largest asset class globally



Carbon is centre stage, bringing materials and circularity into spotlight

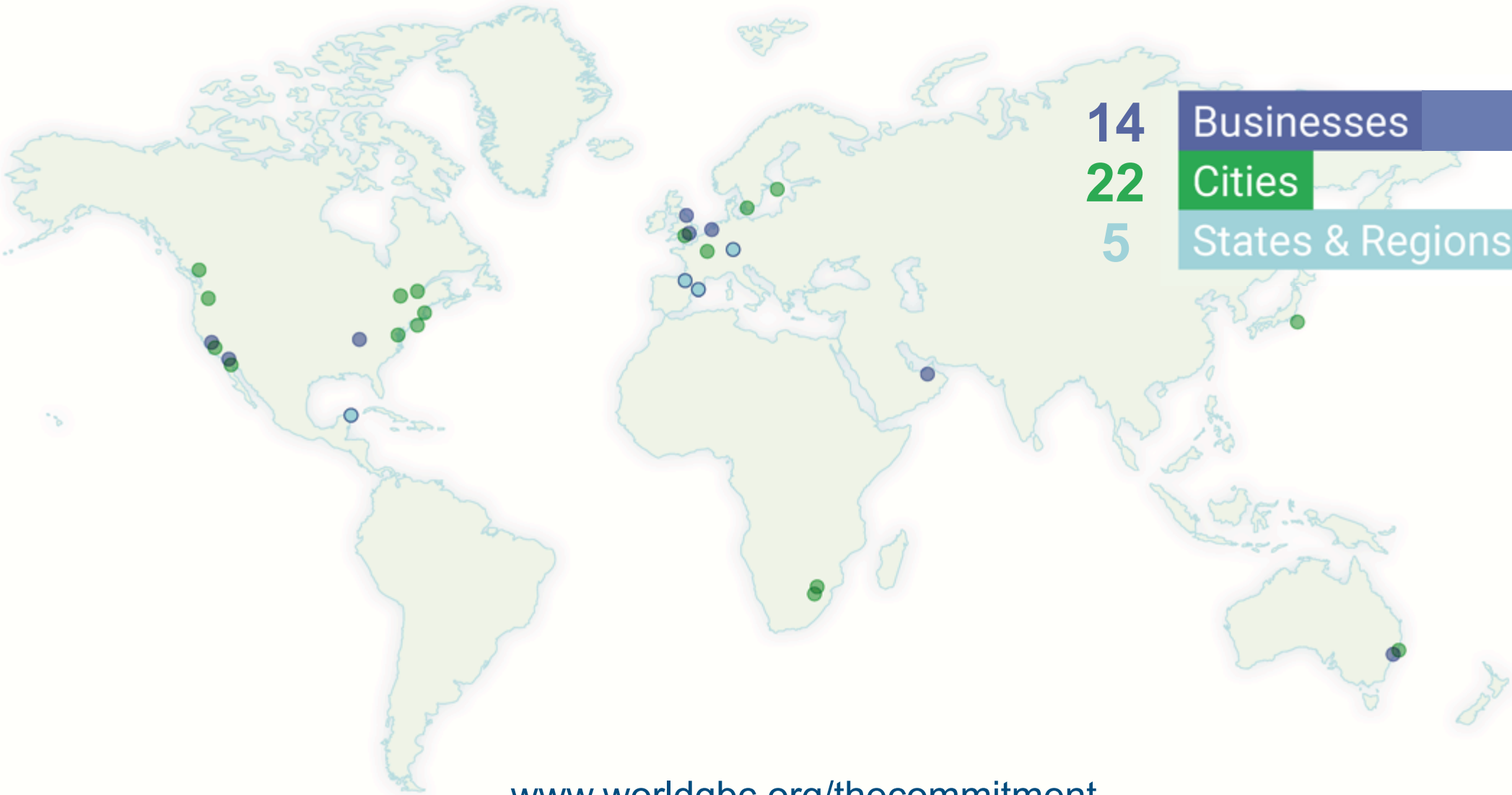
Post-COP 21: shift from Energy to Carbon

Carbon is centre stage



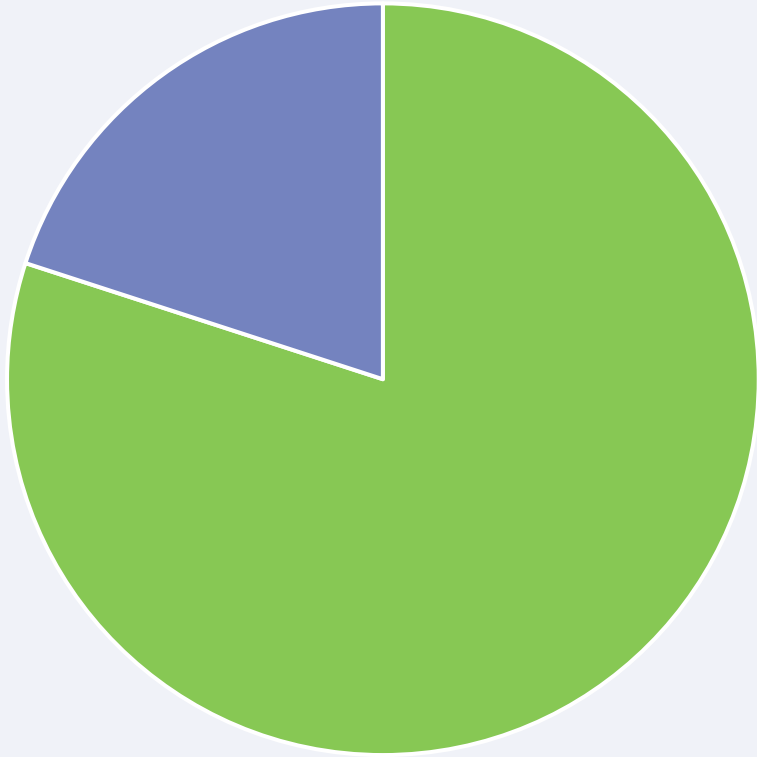
Achieving Paris Agreement
=
Urgent Action Towards
Net Zero Carbon Buildings

The Net Zero Carbon Buildings Commitment



www.worldgbc.org/thecommitment

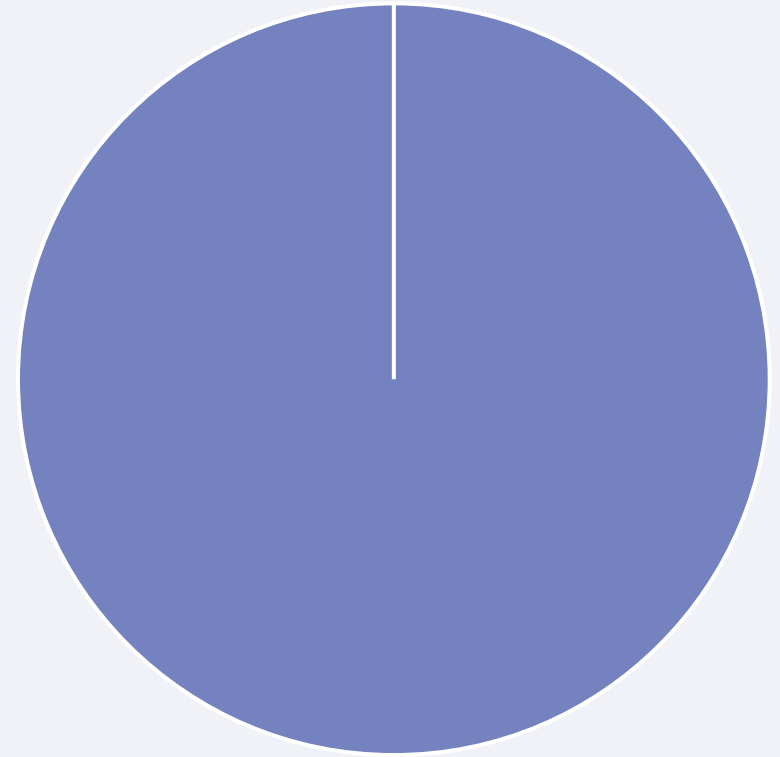
Embodied carbon in the spotlight



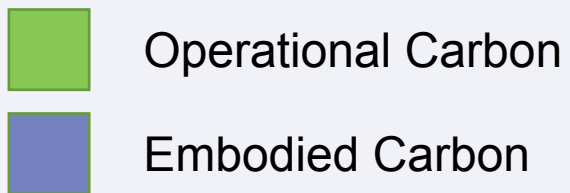
Global average



Typical EU new build

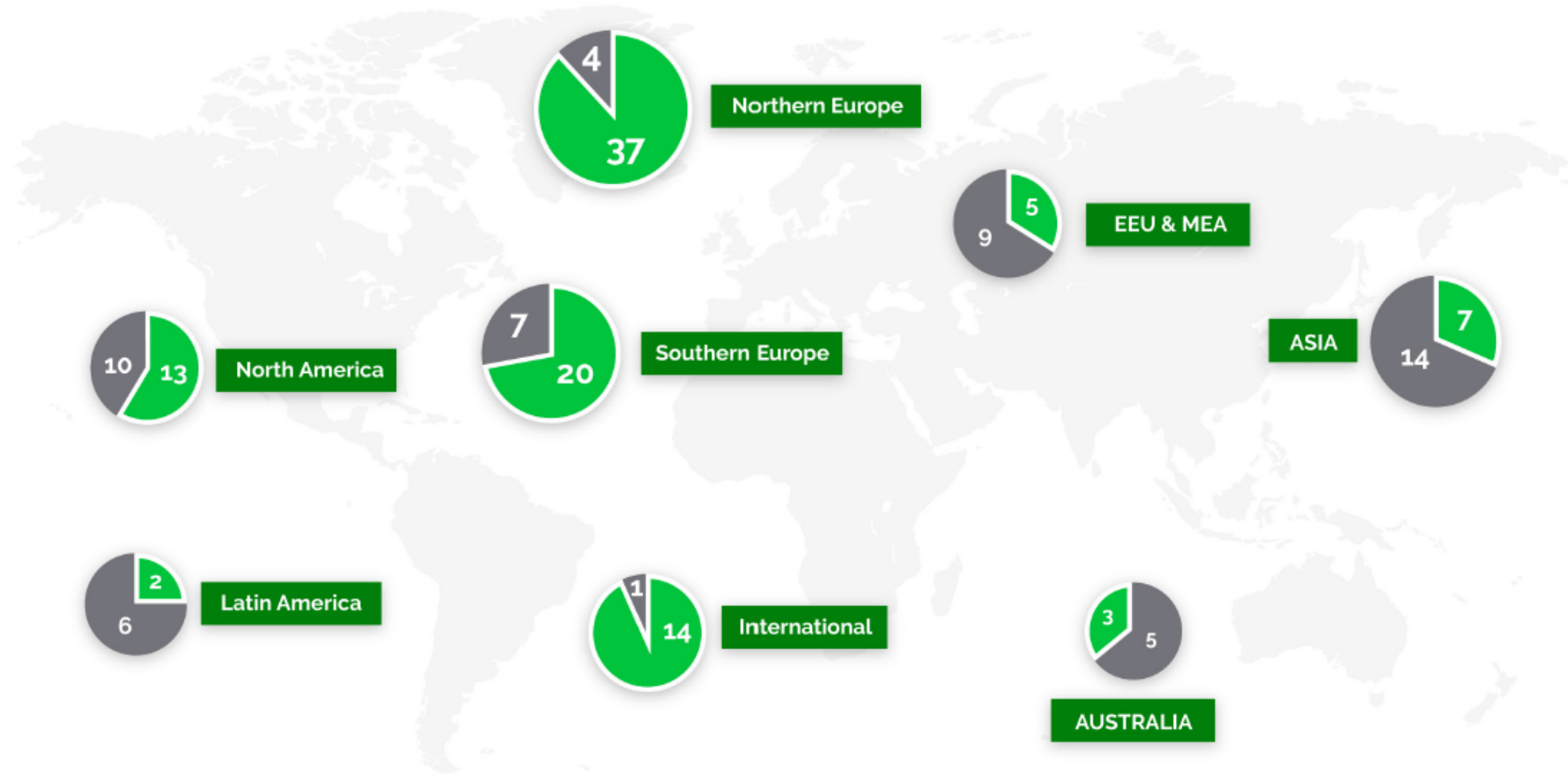


Net Zero
Operational Carbon



CARBON IN GREEN CONSTRUCTION SYSTEMS

SCOPE: MULTI-CRITERIA BUILDING & INFRASTRUCTURE CERTIFICATIONS & CARBON ONLY



■ Embodied carbon in scope

■ Embodied carbon not in scope

(c) Bionova Ltd



**ADVANCING
NET ZERO**



**WORLD
GREEN
BUILDING
COUNCIL**



**CHILDREN'S
INVESTMENT FUND
FOUNDATION**



**European
Climate
Foundation**

**WE MEAN
BUSINESS**



Shifts towards circular thinking



European
Commission

CIRCULAR ECONOMY

Closing the loop

AN AMBITIOUS EU CIRCULAR ECONOMY PACKAGE

CIRCULAR ECONOMY

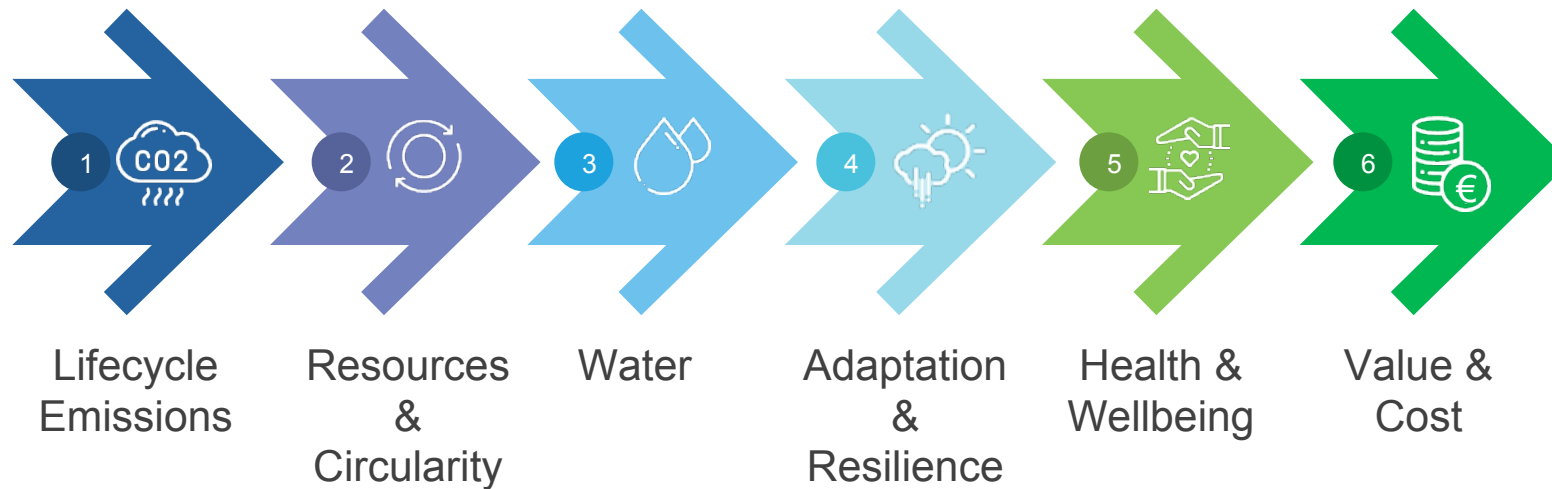
Level(s)

Building sustainability
performance

#BuildCircular

Level(s) - the future debate

The emerging 'common EU language' for sustainable building and circular thinking.





**CIRCL,
ABN AMRO,
Amsterdam**



**Investors want to be part of
the solution**

TCFD


TASK FORCE ON
CLIMATE-RELATED
FINANCIAL
DISCLOSURES



A global approach to
**sustainable
finance**

#SustainableFinanceEU



A pair of hands is shown holding several crumpled Euro banknotes. The banknotes are in various colors, including blue, orange, and green, and are held in a way that they are slightly bunched together. The background is a soft, out-of-focus light color.

**New financing
models are needed
to ensure our building
stock is 'Paris Proof'**

Buildings underpin
one third of
Europe's banking
sector's assets



Lack of **awareness**

Lack of a **common standard**

Lack of **coordinated action**

A photograph of a modern, multi-story apartment building with white facades and blue-tinted balconies, set against a blue sky with light clouds. The building is viewed from a low angle, looking up.

A compelling vision

A new **market standard** for Paris Proof mortgages

A call to action to banks, industry and governments

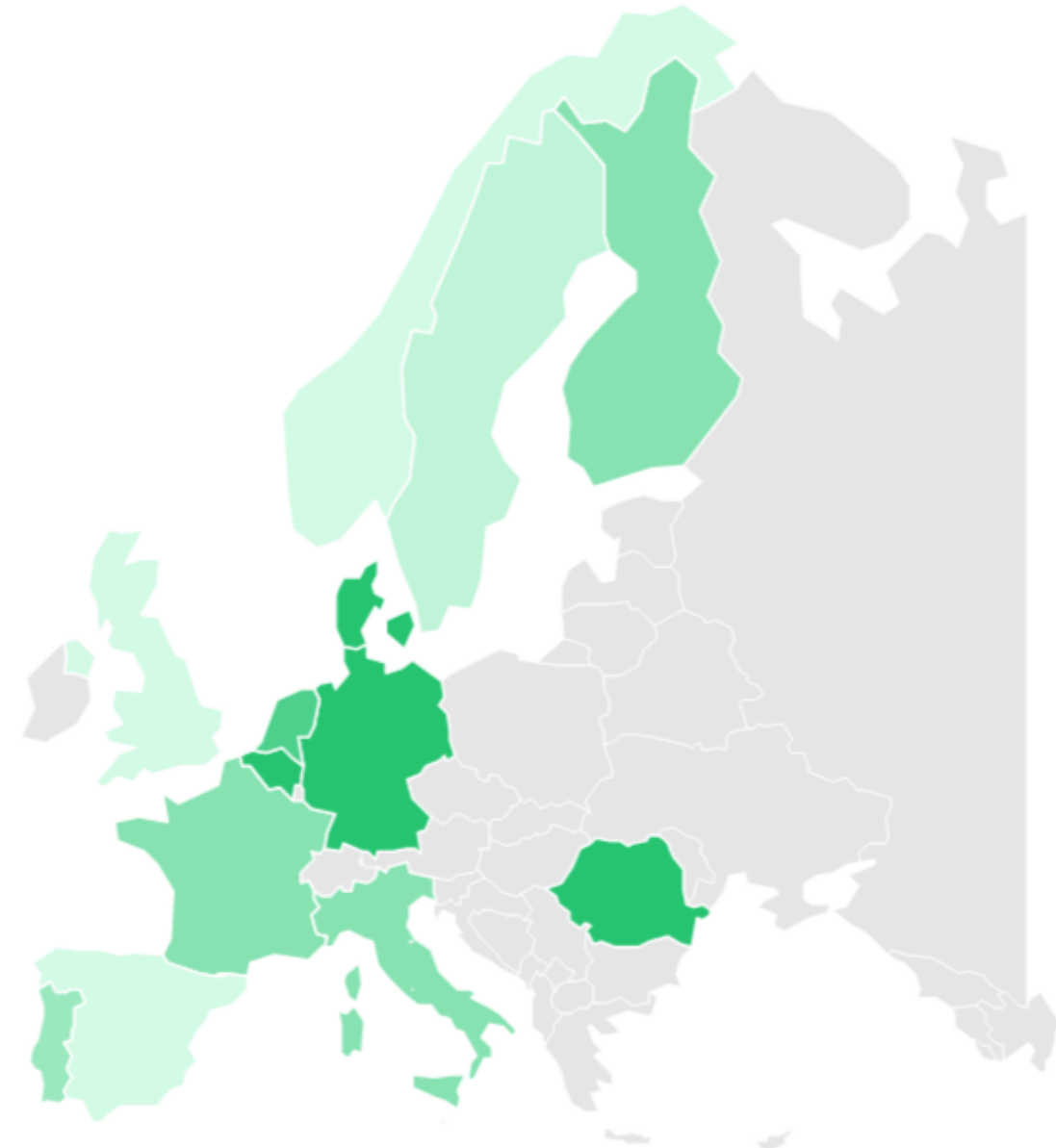
**CREATING AN ENERGY EFFICIENT
MORTGAGE FOR EUROPE**

TOWARDS A NEW MARKET STANDARD

The Energy Efficient Mortgages Pilot



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 746205

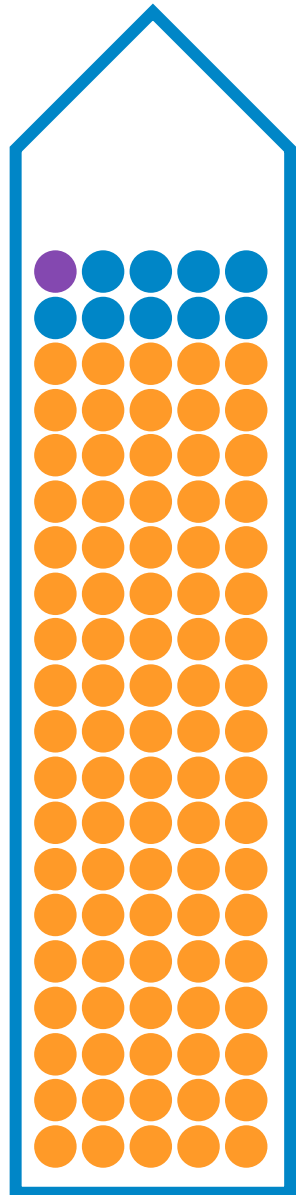




Health and wellbeing

Driving the Business Case

Investing in staff health and wellbeing provides a sizeable return



● 1%
Energy Costs

● 9%
Rental Costs

● 90%
Staff costs in salaries and benefits



- Improved staff productivity
- Increased building value
- Higher occupant satisfaction
- Reduced illness and absenteeism
- Reduced staff turnover and training costs



EIGHT FEATURES THAT MAKE HEALTHIER AND GREENER OFFICES

1. INDOOR AIR QUALITY & VENTILATION

Healthy offices have low concentrations of CO₂, VOCs (volatile organic compounds) and other pollutants, as well as high ventilation rates.



101%

WHY? increase in cognitive scores for workers in a green, well-ventilated office.¹

2. THERMAL COMFORT

Healthy offices have a comfortable temperature range which staff can control.



6%

WHY? fall in staff performance when offices are too hot and 4% if too cold.²

3. DAYLIGHTING & LIGHTING

Healthy offices have generous access to daylight and self-controlled electrical lighting.



WHY?

46 minutes

more sleep for workers in offices near windows.³

4. NOISE & ACOUSTICS

Healthy offices use materials that reduce noise and provide quiet spaces to work.



66%

WHY? fall in staff performance as a result of distracting noise.⁴

5. INTERIOR LAYOUT & ACTIVE DESIGN

Healthy offices have a diverse array of workspaces, with ample meeting rooms, quiet zones, and stand-sit desks, promoting active movement within offices.



WHY?

Flexible working helps staff feel more in control of their workload and engenders loyalty.⁵

6. BIOPHILIA & VIEWS

Healthy offices have a wide variety of plant species inside and out as well as views of nature from workspaces.



7-12%

WHY? improvement in processing time at one call centre when staff have a view of nature.⁶

7. LOOK & FEEL

Healthy offices have colours, textures, and materials that are welcoming, calming and evoke nature.



WHY?

Visual appeal is a major factor in workplace satisfaction.⁷

EMPLOYEE ENGAGEMENT



Healthy offices have employees that are regularly consulted and that feedback is used to drive continuous improvement.⁸

8. LOCATION & ACCESS TO AMENITIES

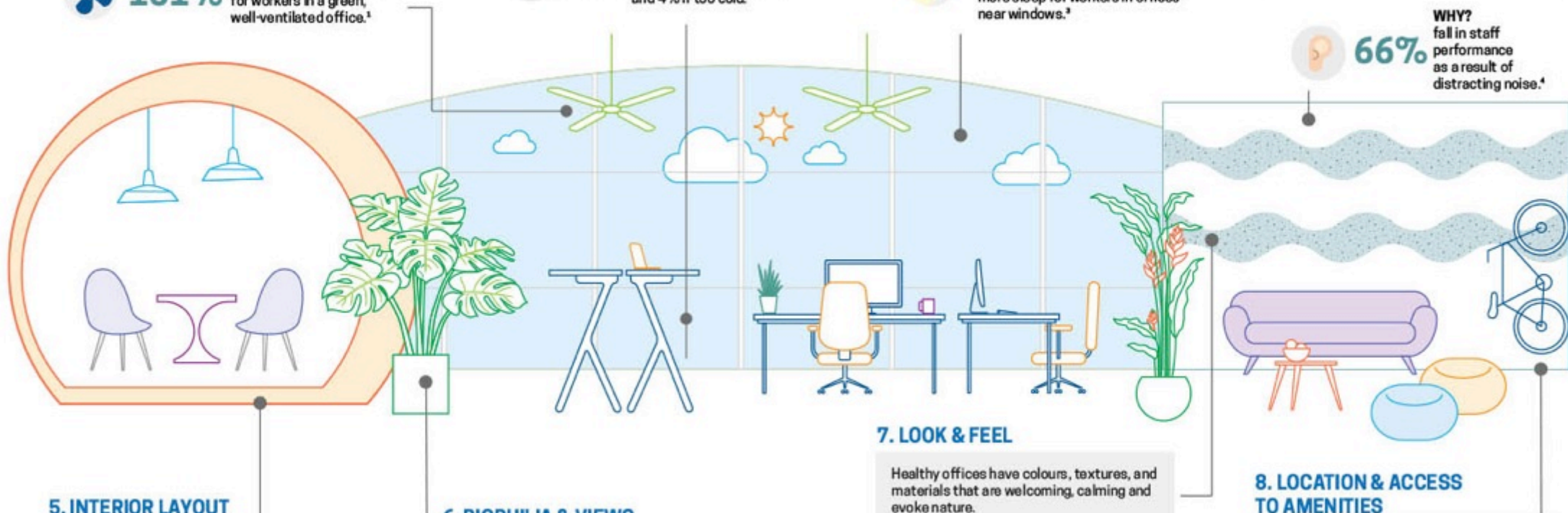
Healthy offices have access to public transport, safe bike routes, parking and showers, and a range of health food choices.



€27m

WHY?

savings through cutting absenteeism as a result of Dutch cycle-to-work scheme.⁹



Collecting data and supporting debate

2014



2016



2018





Thank you!

europe@worldgbc.org

