How to make any building future-fit

A five-step guide to optimal building performance

CUNDALL

As we shift to a net zero building environment, no building can be left behind.

That means existing buildings are likely to benefit from the equivalent of a fitness program to help them achieve optimum performance. And just as a personal training program starts by getting a health check to establish the state of our cardiovascular fitness, weight, strength, flexibility, and endurance, so too a building should get the equivalent of a health check.

Here's why, and how it can be done.

Preventative medicine is part and parcel of everyone's lives, which makes sense, because as the saying goes, one's health is the greatest wealth. But have we considered applying this thinking to the buildings we own or occupy, or an asset portfolio we aim to grow the value of? As we enter the climate-changed future, with a new and heightened awareness of the relationship between public wellbeing and the quality of buildings, taking the pulse of our places is vital.

At the recent COP26 Summit on Climate Change, a common prescription for remedying the threat of global heating was agreed to by 200 countries. This goes well beyond a band-aid approach, and commits nations to:

- Mitigation: near-global net zero emissions
- Adaptation: increased preparedness to climate risks
- Finance: mobilised billons and trillions of climate finance
- Collaboration: accelerated collaboration between governments, businesses, and societies.

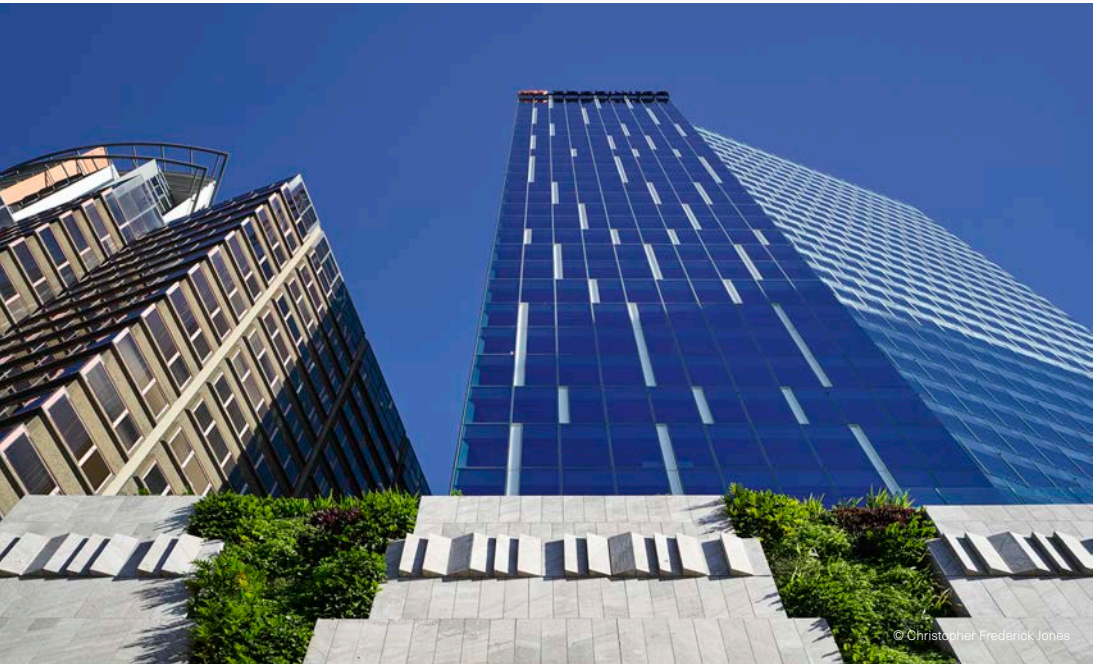
Click on this icon to read more at cundall.com

CUNDALL

Given the building sector is responsible for a staggering 38% of global energy-related emissions, it is obvious that governments, businesses, and societies are looking to operate existing buildings at their maximum efficiency to reduce energy use and related carbon emissions. This not only creates substantial progress towards reaching net-zero emissions goals, it also makes good business sense.

> Financiers in even the toughest markets now recognize that green buildings have higher value than standard structures as they have lower fiscal, regulatory, and reputational risks.
>
> *Global Alliance for Buildings and Construction 2020 Global Status Report*

480 Queen Street, Brisbane, Australia



Property's fitness regime has changed

It used to be financial returns were the only real performance indicator investors used to gauge asset health. But now human health, well-being and equity are taking equal place for asset owners, tenants, and regulators. This means it is no longer optional for existing buildings to have a sustainability framework if they are to stay on the right side of the balance sheet.

The three things any asset owner or manager should consider are:

- Has your building(s) undergone a health check?
- Do you know what a health check for your building(s) should look like?
- Is the health check for your building(s) appropriate?

CUNDALL

Our five-step guide to getting your building into shape

STEP ONE

How does the building currently perform?

Understanding the status of the building is the first – and most significant step – towards a building's Health Check. If you can't measure it, you can't improve it. Simple.

PriceWaterhouseCoopers, Emaar Square, Dubai

But what should you measure?

Energy and water performance, carbon and greenhouse gas emissions, waste generation and recycling

Indoor air quality, occupant comfort, health & well-being and productivity

Ease of active commuting options, climate change resilience and pandemic responsiveness

Building Performance Service (BPS) experts assist with measuring and benchmarking an asset using various tools. These include:

- ✓ **NABERS Energy, Water, Waste or Indoor Environment ratings**
- ✓ **Carbon emissions account**
- ✓ **WELL Building Standard**
- ✓ **Green Star Performance**
- ✓ **LEED for Operations + Maintenance**
- ✓ **Fitwel benchmarks**

CUNDALL

STEP TWO

Does the building owner or investment management have a sustainability strategy?

Does the owner, or the investment management that owns your building, have a sustainability strategy?

If that's available, does it specify the environmental, social and governance (ESG) goals and targets for the buildings?

Does it identify and address the climate risks that are vital to address for the building to be competitive?

No athlete ever stepped onto a winners' podium by chance - positive outcomes are a product of vision, planning, and follow-through.

GenZero Schools Research Project, England, United Kingdom

The ESG metrics of buildings are the basis of league tables including:

- Global Real Estate Sustainability Benchmark (GRESB)
- Taskforce on Climate-Related Financial Disclosures (TCFD)
- Carbon Disclosure Project (CDP)
- Science Based Target initiative (SBTi)
- Global Reporting Initiative (GRI)
- Social Value (SROI)

CUNDALL

STEP THREE

Is there a clear pathway to maximise building performance and achieve ESG goals?

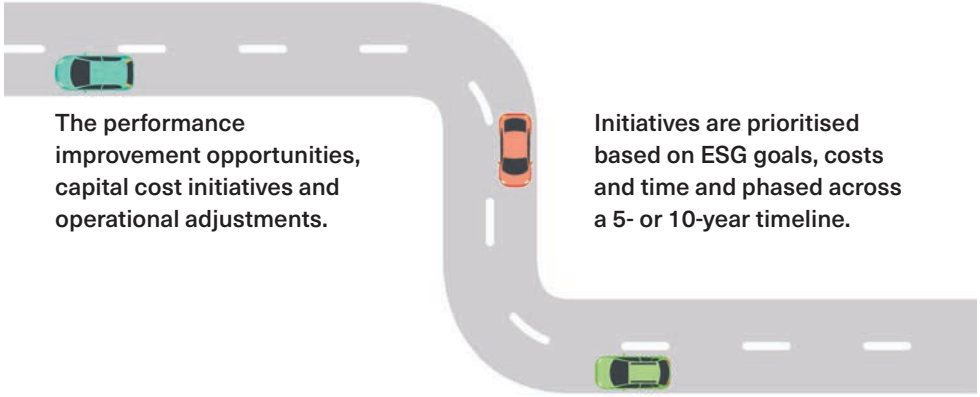
If you understand the current performance and the environmental, social and governance (ESG) targets of your building, you're in a good position. The next step is looking at what plans you have in place to make it better.

Is there an overarching roadmap that provides a clear pathway with costings, program timelines and identified stakeholders that will help those ESG targets be achieved?

A sustainability roadmap for your building gives the owner and asset manager a clear idea of when to use which funds and where, so the pathway is based on synergy, not a stop-start-stall-start process.

Sustainable Buildings Research Centre (SBRC) University of Wollongong, Australia

A roadmap identifies:



The performance improvement opportunities, capital cost initiatives and operational adjustments.

Initiatives are prioritised based on ESG goals, costs and time and phased across a 5- or 10-year timeline.

It also provides progress monitoring and reporting requirements so that Health of the building is continuously checked.

CUNDALL

STEP FOUR

Are your buildings resilient to climate risks – life, material and financial?

Our planet is on track to exceed 1.5 degree Celsius over the next two[1] decades. In other words, the planet is running a fever, and the effects of this heating are both dangerous and costly.

Burwood Brickworks, Melbourne, Australia

Have you assessed and addressed these climate risks - to the lives of the occupants, to your operations and to the market value of the building?

Is there an adaptation plan in place to increase preparedness for climate risks? Is the building ready for 100% electrification without reliance on fossil fuels?

Building Services engineers create robust climate risk frameworks, identifying risks and opportunities, and ensuring buildings don't become a stranded (worthless) asset.

It is important to understand a building's vulnerability to climate change. Exposure assessments are carried out across various future climate scenarios and projections, based on pathways developed by the IPCC and other governmental research organisations.

The building should be capable of:

- Protecting itself from extreme rainfall events.
- Protecting itself from bush fire or excess bush fire smoke.
- Providing enough HVAC cooling capacity during extreme summer conditions.
- Essential systems such as digital communication, lifts and fire protection functioning adequately during cyclones and extreme heat.

[1] The 6th assessment report released by the Intergovernmental Panel on Climate Change (IPCC) in 2021

CUNDALL

STEP FIVE

Is your ESG Strategy and Sustainability Roadmap up to date?

Governments and regulators are rapidly responding to the climate crisis with new regulatory requirements and higher standards.

Workzone East, Perth, Australia

Financial institutions are prioritising sustainable finance markets and sustainability-linked loans and bonds. Organisations and investors are seeking greater clarity and transparency regarding ESG performance and climate-related risks and reporting.

Is there a mechanism in place to continually update the ESG Strategy and Sustainability Roadmap for the building to address these rapid changes?

The formulation of Taskforce on Climate-Related Financial Disclosures (TCFD) reporting and development of Science Based Targets initiative (SBTi) are vital for continuous review and improvements.

The Health Check for existing buildings is not a once-a-decade exercise

It is an existential exercise, checked:
- ✓ **annually**
- ✓ **monthly**
- ✓ **sometimes daily**

Cundall's collaborative process which includes technical know-how and communication-ready output can help the building be relevant now, and for the next 30 to 40 years.

CUNDALL

Get in touch

Cundall's BPS and ESG experts are your building's personal trainers: helping to get your building future fit. These experts formulate sustainability strategies and roadmaps for asset owners, facility managers or commercial tenants. We also help you update an existing strategy to incorporate the most up-to-date performance improvement strategies and ESG indicators.

Then, when you are ready to implement your building fitness program, our Building Services engineering team can assist with tuning, retro-commissioning, energy monitoring, system upgrades or retrofits and predictive maintenance planning to keep your building operating at peak performance.

Find out more about our Building Performance Services

Mathuran Marianayagam

Get in touch:
m.marianyagam@cundall.com

+61 404 289 450

CUNDALL

@Cundall_Global

www.linkedin.com/company/cundall

www.cundall.com

www.cundall.com
Asia Australia Europe MENA UK & Ireland

ONE PLANET LIVING | An initiative by Bioregional