Andrew Eagles  
CEO  

Vision  
Living, working and playing in healthy and comfortable homes and buildings  

500 members
Who are we?

- A member of World Green Building Council
- A not-for-profit transforming the built environment
- Green building councils have certified an area 10 times the size of Paris. This will double in next 4 years.
- Have dialogue with cities & stakeholders globally
- World class training and events inspire action
Global context

Source: GBCA

EY megatrends: The upside of disruption
Why build quality buildings?

**Outside Views**
- Mental Function & Memory: 10-25% better
- Call Processing: 6-12% faster
- Hospital Stays: 8.5% shorter

**Daylight**
- Students achieve 5-14% higher test scores and learn 20-26% faster
- Workers are 18% more productive
- 15-40% increase in retail sales

**Systems**
- Productivity increases by 23% from better lighting
- 11% from better ventilation
- 3% from individual temperature control
New Zealand's projected greenhouse gas emissions against its targets

- Gross emissions
- Net emissions
- Targets
- Gross (proj)
- Net (proj)

Year:
- 1990
- 2000
- 2010
- Transition period
- 2020
- 2030
- 2040
- 2050

Emissions (Mt CO₂-e):
- 0
- 20
- 40
- 60
- 80
- 100
- 120

Source: morganfoundation.org.nz
Green Star Cumulative Registration
The future

1) Is there interest?

2) Is it possible?

3) Quickest way to mainstream / enable change?

Belvedere / Ecostar Homes – 10 star design rating
1) There is interest

**World** - Green Building Councils certified 1.04 billion m² of building space globally (10 times the size of Paris) in 10 years

Will double by 2020

**New Zealand** - 2014 research - 70% of respondents “energy efficiency is either important or very important in a home”

2016 – Colmar Brunton findings
Colmar Brunton - 2016

I am willing to pay a bit more for sustainably sourced products – 71% (2016) – rise from 64% (2015)

How much influence does sustainability have on who you chose to buy or deal with? **Rise of 14- 6%**

71% Willing to pay more

2015 - NZ signed up to UN Development Goals- 69% of Kiwis rate “sustainable cities and communities” as very important

Tracking study of 13,600 people
Australia – tool released last year uptake 7 x faster
“NABERSNZ is an invaluable tool for owners and building managers to track performance and the likely impact of works.

We used NABERSNZ as the benchmark so we knew 205 Queen Street was tracking at around 3.5 stars. That helped us make investment decisions required to reach 4 stars.”

Jason Happy,
National Facilities Manager
Kiwi Property
2) It is possible
Other energy sources
Batteries changes everything
Wider interest beyond energy
Rise of performance
Change is happening

1) Financial system
Green buildings are valued by the investment community

Outcomes that matter

Leading indexes and financial instruments like GRESB and Climate Bonds recognise Green Star as a measurement of quality and leadership
STOCKLAND ISSUES FIRST AUSTRALIAN CORPORATE GREEN BOND

Stockland has successfully priced the first green bond issued by an Australian corporate.

Stockland’s green bond is a debt instrument where the proceeds are used to fund eligible environmentally sustainable projects. This will include funding the development and redevelopment of green star rated retail, commercial, residential and retirement living projects ensuring Stockland’s continued leadership in sustainability. Stockland was named one of the Global 100 Most Sustainable Corporations in the World at the World Economic Forum in 2012.

Now - 2% of China’s bonds are Green Bonds
Future - 20% of all bonds in China to be Green

Total value $6 trillion (as at June 2016)
The PCA/MSCI Green Property Index showed that, up to the financial year June 2016, Green Star rated office buildings delivered:

- **6% capex rate** (0.25 percentage points lower than the market)
- **6% points lower vacancy rate**
- **13% total return** (2 percentage points higher than the market)

**PCA/IDP index** - 46% lower opex – 27% increase in value

**API/PFI index** – 12% increase in asset value, 5% premium in rental value
Enabling change 2)

a) We are providing new tools

b) Councils driving change
Green Star – Communities is a new framework for sustainability

5 principles that define sustainable communities

- Enhanced liveability
- Economic prosperity
- Environmental responsibility
- Design Excellence
- Strong Leadership and Governance
GREEN STAR - PERFORMANCE

UNIVERSAL, RELEVANT, FLEXIBLE

- Offices
- Retail centres
- Industrial facilities
- Hospitals
- Primary, secondary, and tertiary schools
- Assembly buildings
- Big box retailers
- Hotels
- Mixed use buildings
- Police and fire stations
- Sporting venues
- Laboratories
- Etc...
Green Star - Performance

- Management
- Indoor Environment Quality
- Energy
- Transport
- Water
- Materials
- Land Use And Ecology
- Emissions
- Innovation
Types of Criteria

**Action**
Points are awarded based on actions carried out by the building owner, facilities management team, or other relevant parties to achieve best practice outcomes.

**Building**
Points are awarded based on attributes or outcomes that are heavily reliant on the building or equipment present in the building.

**Data**
Points are awarded based on outcomes verified by performance data

**Policy**
Points are awarded based on management policy, strategies or framework designed to drive best practice outcomes.
The effective management of building operations and services is a key aspect of sustainable performance. The ‘Management’ category assesses the policies, procedures, targets and strategies put in place to ensure buildings operate to their fullest sustainable potential. Management credits address aspects of building management including the provision of systems information to tenants, the ongoing monitoring of energy and water use, and the implementation of green cleaning policies and practices.
MANAGEMENT

• Green Star Accredited Professional
• Building Information
• Metering & Monitoring
• Tuning & Commissioning
• Environmental Management
• Green Cleaning
• Commitment to Performance
Indoor environment quality is a key aspect of sustainable building performance. The creation of high quality indoor environments has been shown to increase productivity and occupant satisfaction. Credits within the ‘Indoor Environmental Quality’ category assess and reward strategies and actions taken to ensure buildings are healthy and comfortable places to live and work within.
INDOOR ENVIRONMENT QUALITY

- Indoor Air Quality
- Hazardous Materials
- Lighting Comfort
- Daylight & Views
- Thermal Comfort
- Acoustic Comfort
- Occupant Satisfaction
Buildings are the single largest contributor to the world’s energy consumption and greenhouse gas emissions, using 40 per cent of global energy and generating around 30 per cent of all carbon emissions. Within the ‘Energy’ category, applicants are rewarded for the implementation of strategies and actions to measure and reduce a building’s operational energy use, reliance on grid energy supply and the greenhouse gas emissions associated with grid energy consumption. Such reductions can be achieved by measures to minimise energy demand, increase efficiency or use energy from alternative sources such as the sun or wind.

ENERGY

• Greenhouse Gas Emissions

• Peak Electricity Demand
New Zealanders deserve to live in homes that are warm, dry, homes constructed with little waste and responsibly sourced material.

Thank you for your help championing & leading the way.
Incentivising better homes / buildings

Incentive quality – support development

✓ Mandatory labelling
✓ Development contributions
✓ Faster building consent
✓ Higher density or height
✓ Rateable values
Enabling change 3) NZGBC

• Listening
  – Meeting members / influencers – NZ wide
  – Day of truth for Homestar
  – Survey
  – Consultation on new standards

• Aligning with other standards – Passivhaus, WELL,

• Homestar V4 – quicker, simpler, more marketable

• New tools - Green Star
  - Green Star Communities
Growing influence of NZGBC

The place the sector comes together to improve quality
+ 32,000 website monthly page views
+ 30,000 recipients to e-bulletins
+ 10,000 social media connections
National TV, newspapers, articles
Ministers & senior officials clear carbon reduction a key driver
World class events inspiring action