



**NDY**  
A TETRA TECH COMPANY

# SUSTAINABILITY

Capability statement

# OUR SUSTAINABILITY CONSULTANTS HELP YOU CREATE **LOW-CARBON AND PEOPLE-CENTRIC PLACES** TO BUILD LONG TERM RESILIENCE

We're pragmatic about sustainability providing advice that enables valuable outcomes. Whether you need support assessing whole-of-life carbon, designing a healthy workplace or planning for net zero, our sustainability specialists recommend solutions that align with your goals. Through technical expertise and a well-resourced global network, we shape local solutions that help balance risk with reward.



Hayley Koerbin

GLOBAL SUSTAINABILITY DIRECTOR  
NDY

# WHOLE-OF-LIFE SUSTAINABILITY SERVICES

Our team consults on whole-of-life sustainability services – from advising on global strategy and policy, wayfinding through risk and trends, through to practical consultation to achieve your health and wellbeing goals – we deliver data-driven sustainable design solutions for buildings, places and organisations across Australia, New Zealand, Europe and Canada.

## Creating future-proof strategies to help you stay informed on your investment position.



We help you get clear on your environmental, social and governance goals and create a viable sustainability strategy that delivers for you long-term.

For investors and developers, this means greater insights into evolving market conditions, emerging trends and legislative change so you can identify opportunities and mitigate risk early.

Together we'll develop robust targets from evidence-based solutions, and create roadmaps that help you add value, communicate, monitor and improve your sustainability performance year-on-year.

## Designing resilient solutions to construct people-centric, healthy buildings and places.



We help you embed both health and wellbeing and low-carbon goals into every stage of your project's lifecycle, from concept design through to construction and operation.

For organisations and designers, this means creating people-centric places – realising sustainability design aspirations and implementing proven initiatives to support improved health and wellbeing outcomes.

We'll consult with you and key stakeholders to solve design challenges, embed sustainable concepts, manage construction compliance and help you monitor your operations to maximise long-term efficiency. We achieve world-class ratings for our projects beyond industry standards to showcase excellence in sustainability.

## Maximising operational efficiency and delivering spaces of the future.



We help you assess your footprint and create tangible actions to decarbonise your operations and infrastructure.

For organisations, this means greater insights into how efficient your assets are developing and implementing verified strategies that deliver to your sustainability commitments.

Through data-driven analysis, we'll support you to define your emissions baseline, conduct whole-of-life carbon assessments and identify opportunities for upgrades. Advising, verifying, and liaising with sustainability certification bodies on your behalf, we help you to achieve independent certification of your carbon reduction efforts and achievements.

# OUR SERVICES

## STRATEGIC ADVISORY



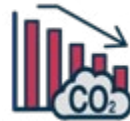
Materiality assessment  
and ESG strategy



Company ESG  
reporting



Due diligence



Carbon accounting  
and offsetting



Decarbonisation  
roadmaps



Stakeholder  
engagement and  
education



Sustainability  
visioning

## MASTERPLANNING, DESIGN AND CONSTRUCTION



Sustainable design  
strategies



Advanced simulation  
and analysis



Resiliency risk assessment  
and adaptation planning



Whole-of-life carbon  
assessments



Zero carbon action  
plans



Verified sustainability  
certifications



Renewable energy  
and storage solutions

## OPERATIONS AND ASSET REPOSITIONING



Building monitoring,  
auditing and tuning



Operational and  
maintenance action plans



Zero carbon action  
plans



Verified sustainability  
certifications



Workplace policy  
development



The background of the image is a photograph of a modern building's interior. It features multiple levels with glass railings and wooden paneling. A large, spherical light fixture hangs from the ceiling. The overall aesthetic is clean, bright, and architectural.

# **WE DEVELOP SUSTAINABLE SOLUTIONS TO HELP MAXIMISE YOUR ASSET'S POTENTIAL**

Build the appeal of your assets with strategic sustainability services that help deliver on your environmental, social and governance targets, including assessing whole-of-life carbon and creating tangible actions for achieving net zero. Our multidisciplinary oversight helps you prioritise operational efficiency and financial return while mitigating risk.

# STRATEGIC ADVISORY

By engaging NDY, you tap into a global network of sustainability experts who will help your organisation:

- identify and address sustainability related risks and opportunities
- respond to stakeholder and regulatory requirements
- enhance the efficiency, reputation and performance of your assets and overall business.

While each organisation and solution is unique, we work with you to find the best solutions to reach your sustainability goals.

## MATERIALITY ASSESSMENT AND ESG STRATEGY

We work with your business and stakeholders to establish a roadmap to improve ESG performance. The ESG strategy we develop together is based on a [materiality approach](#) and will align with your ESG principles and sustainability position. Your unique roadmap will explore opportunities to help you build clear and appropriate commitments to share publicly.

## ESG REPORTING

Our team is experienced in putting together voluntary and mandatory ESG disclosures using reporting tools and platforms such as [GRESB](#), [CRREM](#) and the [Science Based Targets initiative \(SBTi\)](#). This includes a range of activities, from end-to-end management of the reporting process through to developing internal procurement processes and data sets. We seek out opportunities for organisations to improve and highlight continuous improvement in reporting.

## DUE DILIGENCE

We provide pre-development and leasing advice across a range of market sectors, including government and local council planning policy compliance reporting, development authority consultation and pre-purchase site-selection, auditing and performance modelling. These activities tie back to your organisation's ESG strategy and future reporting to ensure that sustainability targets are achieved and your net zero ambitions are on track.

## CARBON ACCOUNTING AND OFFSETTING

Our specialists advise on options for informal validation or formal certification of carbon footprints and carbon management plans and the specific requirements for each. This work gives credibility to carbon neutral and net zero claims and enables a formalised approach to target-setting for carbon reduction initiatives.

Our team has experience working with peak bodies including the [Carbon Trust](#), [Climate Active](#), [Toitū Envirocare](#) and the [World Green Building Council](#) and can manage the process on your behalf.

## DECARBONISATION ROADMAPS

Our global team can develop and implement a decarbonisation roadmap for your organisation.

In collaboration with our building services specialists, we help you identify assets in need of improvements across your portfolio, propose solutions for decarbonisation and then categorise and prioritise for investment spend.





## STAKEHOLDER ENGAGEMENT AND EDUCATION

We bring a global perspective to environmental and social sustainability issues and understand the profound impact they have on all aspects of your operations, both now and into the future.

We can help you identify, prioritise and communicate the sustainability issues that are most critical to your organisation. This can include stakeholder surveys, workshops and materiality assessments.

## SUSTAINABILITY VISIONING

We work closely with you and your design teams to develop an integrated sustainability vision for your project or subsequent masterplan. Incorporating sustainability initiatives from the outset, alongside benchmarking against world-leading projects, is critical to drive innovative, low-carbon and people-centric places.

Our future-focused approach also considers the impacts of climate change and potential mitigation and adaptation techniques for your projects and organisation to minimise risk in this changing climate.

Opportunities may include net zero carbon frameworks, precinct-scale energy, water and waste solutions, low emission transport infrastructure, biodiversity and nature-based solutions, cultural celebration concepts and a focus on healthy, thriving and connected communities.



Offices, Australia

# ARCADIA ESG ADVISORY

Sydney, NSW

## Services

ESG strategy, decarbonisation roadmap, company ESG reporting, verified sustainability certifications, building auditing

**Client:** Arcadia

**Completion:** Ongoing

Arcadia Funds Management is a boutique institutional investment management and advisory business focused exclusively on institutional capital in the real estate sector. Established in 2002, Arcadia has grown into one of Australia's leading boutique institutional real estate investment managers and advisers.

Arcadia manages the Australian Wholesale Property Fund (AWPF) and the PSS/CSS B Property Trust (PCB) Property funds.

Arcadia made a commitment to their stakeholders to improve their Environmental, Social & Governance (ESG) performance. NDY was engaged to assist in developing an appropriate framework, commitments and initiatives to support this.

One of Arcadia's ESG targets, set through NDY's engagement, is their carbon neutral target. Our team investigated the Funds' commercial, industrial and retail assets to develop a zero carbon transition plan. Certain assets are also jointly owned with other partners, making reviews at an asset level complex.

NDY has worked with Arcadia over the last three years to develop a baselines for each fund to then benchmark their ESG targets against and create continued improvement and value. Our team has become more involved at an asset level to drive

sustainable performance across all sectors of Arcadia (office, retail and industrial) including:

- Undertaking a detailed audit of the World Square Shopping centre
- Partnering with NDY's services team, undertaking the major refurbishment works at 52 Goulburn St and 1 Chifley Square
- Completing Green Star Performance certifications for two industrial assets.

Additionally, NDY continues to work with Arcadia to ensure year-on-year improvement of their GRESB rating.





Offices, United Kingdom

## FORA ESG ADVISORY

London

### Services

ESG strategy, carbon accounting, decarbonisation roadmap

**Client:** Fora

**Completion:** 2021

NDY provided advisory services to Fora as they embarked on their sustainability journey to frame their ESG purpose and strategy, as well as collaborating on various aspects of company and asset-level implementation initiatives.

NDY's most recent support centred around developing a portfolio decarbonisation roadmap for Fora to support their Net Zero emissions goal, which included:

- Developing both organisational and asset-level baseline greenhouse gas (GHG) emissions assessment for their scope 1,2 and 3 emissions
- Mapping a 10-year GHG emissions trajectory for their expanding workspace portfolio, including predicted embodied carbon impacts from new workspaces
- Estimating future emissions reduction from decarbonisation initiatives and supporting a timeline for Net Zero Emissions declaration.

In May 2021, our experts led a panel discussion on decarbonisation and Net Zero to launch Fora's 'Green Month' – a catalyst for the firm communicating its implementation of member-focused sustainability initiatives.

In 2022 we followed this up by undertaking a net zero carbon pathway at asset and portfolio level. This consultancy was supported by undertaking a series of deep dives into the performance of the portfolio. Notably undertaking:

- Energy Audits of all live sites
- Whole life cycle carbon assessments of the 2022/23 pipeline of projects
- A detailed review of Scope 3 emissions across the business, including enhancing information pathways.

In 2023 we will be supporting the reporting of Year 1 data against the baseline and the development of a 'net zero' design standard for future projects.

The background of the image is a city street scene at dusk. On the left, a multi-story brick building with many windows is visible, some of which are lit up. A sign for 'TIFFANY & CO.' is visible on the lower part of this building. In the foreground, there is a public square with several large, dark, conical fountains. The sky is a mix of blue and orange, suggesting sunset or sunrise. On the right side, a tall, modern glass skyscraper is visible, with its lights on. The overall scene is a vibrant urban environment.

# OUR MULTIDISCIPLINARY CONSULTANTS HELP REALISE YOUR SUSTAINABLE DESIGN ASPIRATIONS SO YOU CAN **WIN NEW WORK**

Our knowledgeable consultants help you embed sustainability into your vision by providing evidence-based and cost-effective solutions. Through early engagement and active collaboration, we support and strengthen your vision with proven sustainability initiatives that help position you for success.



# MASTERPLANNING, DESIGN & CONSTRUCTION

We carefully and skillfully consider ways in which our communities and cities can become more sustainable through the appropriate management of the built environment.

Our sustainable design expertise values all aspects of sustainability to ensure the projects we design are high performing and resilient across their life cycle, minimise natural resources and provide a healthy and safe space for people where they feel a sense of belonging and purpose.

## SUSTAINABLE DESIGN STRATEGIES

We nurture the relationship between people and planetary health, striking not only a balance but improved outcomes in social and environmental sustainability. Buildings and places must be more than just resource efficient.

We place emphasis on human-centric design, delivering integrated and complimentary solutions which are environmentally responsive, people-focused and resilient. We deliver consultancy services that focus on whole-of-life impact to create efficient, affordable and healthy buildings.

## RESILIENCY RISK ASSESSMENT AND ADAPTATION PLANNING

As our climate changes so too must the way we consider the risks buildings and organisations face. We assess the probability and impact of climate risks to facilitate considered responses, striving for environmental, operational and community resilience.

Our results help clients and policymakers make informed decisions to address regulatory requirements, human health and environmental concerns and future planning scenarios.

## ADVANCED SIMULATION AND ANALYSIS

Our advanced simulation provides real-world data to inform design. We use data to visualise and communicate trends and patterns, challenging the rules of thumb that our industry has become comfortable with and reliant on. Using multi-objective analysis and parametric modelling to influence the built form and drive decision making provides our projects with bespoke and verified solutions.

Our advanced simulation services include:

- precinct-scale simulation of environmental factors such as wind microclimate, air quality and outdoor thermal comfort
- solar exposure and overshadowing impacts of new and existing buildings
- facade studies for optimising solar loads, and decreasing mechanical cooling and heating demand
- balancing natural daylight penetration and internal thermal comfort for enhanced indoor environment quality
- future asset performance under the latest climate change projections
- proof of concept analysis for new and innovative approaches to mechanical air distribution
- optimised control strategies and operating conditions.





## WHOLE-OF-LIFE CARBON ASSESSMENTS

Our team is equipped to drive projects towards lower carbon emissions from the earliest stages, all the way through to completion, with expertise on low and zero carbon design, sustainable procurement and construction strategies. We use data-driven design assessments for decision making, drawing from our database of projects and applying lessons-learned to every scenario.

We balance the carbon impact of materials, construction activities, refurbishment and end-of-life phases with a project's key aims, for example enhancing wellbeing, minimising costs or reducing operational energy. This allows you to make informed low-carbon decisions throughout all project stages and work towards your sustainability targets and certifications.

## ZERO CARBON ACTION PLANS

We provide zero carbon action plans for precincts and buildings with clear actions to achieve zero carbon. This starts with design and follows into procurement, construction and operations.

Our plans future-proof buildings to accommodate any future additional loads, energy storage or demand response solutions which may occur or be implemented

during a building's lifetime. We also consider end-of-life scenarios and provide insight into future solutions for carbon risks such as back-up generation and refrigerants.

## VERIFIED SUSTAINABILITY CERTIFICATIONS

We believe that a robust design framework or certification can help ensure a project's environmental and social sustainability aspirations are realised in design, construction and operation.

We offer formal management and administration against all industry recognised sustainability certification schemes including [Green Star](#), [BREEAM](#), [LEED](#), [NABERS](#), [WELL](#), [Passive House](#) and [Living Building Challenge](#).

## RENEWABLE ENERGY AND STORAGE SOLUTIONS

Increasingly, organisations are recognising that establishing their own supply of renewable energy makes good sense for the bottom line as well as the planet. This applies to landlords and tenants who are looking at ways to deliver on their sustainability objectives.

Our team can work through renewable energy feasibility studies such as solar photovoltaics or geothermal heating that include a strong return on investment and optimise design to provide a low-carbon, resilient solution.



Offices, United Kingdom

# ONE MILLENNIUM BRIDGE

London

## Services

Sustainable design strategies, advanced simulation and analysis, verified sustainability certifications

**Client:** Beltane Asset Management

**Completion:** Ongoing

The refurbishment of One Millennium Bridge creates a contemporary outlook for this London landmark, set in a prominent location on the North Bank of the River Thames. Alongside a complete revitalisation of the building the project will establish new views to the river and to St Paul's Cathedral, improving accessibility to the historic icons of the built environment that surround it.

The project reconfigured the massing of the 250,000 ft<sup>2</sup> 1980s office building. Works include stripping the building back to its structural frame, undertaking numerous extensions, reconfiguring atria and re-cladding the entire facade. The transformation delivers centrally located office accommodation with a host of facilities for tenants and the community, including new retail and restaurants, and multiple accessible roof terraces at upper levels.

Whilst the existing building's roof offered no rooftop amenities and all usable space was dedicated to HVAC plant, NDY's thermal storage design enabled repurposing of the space. This opened up more than 26,909 ft<sup>2</sup> of roof space for public use through garden, retail and restaurant facilities alongside additional A Grade office space.

One Millennium Bridge is an all-electric building with a thermal storage design, utilising large chilled and low temperature hot water storage tanks, located

in the existing basement, with water cooled chillers to transfer and recover heat. Using chilled and low temperature hot water tanks in this way allows for full heat recovery, minimising primary heating plant. The thermal storage system shifts heating and cooling peak loads from peak to non-peak times, reducing operating costs and improving plant efficiency. Currently under construction, the refurbishment has been designed to retain much of the building's structural mass, has targeted a BREEAM 'Excellent' rating and was a shortlisted finalist at The Energy Awards 2021.

[Read more](#)







Offices, Australia

# 12 CREEK STREET ANNEX

Brisbane, QLD

The Annex at 12 Creek Street is a 12-floor commercial building that is home to office spaces, retail tenancies and an exclusive landscaped terrace overlooking the Brisbane River developed by Dexus.

The building's office levels were designed to accommodate both single and multi-lease occupancy, with the ability to subdivide individual floors to a maximum of six suites. This provides flexibility for both the building owner and tenants.

The building's facade, which was designed to align with Brisbane City Council's masterplan: Buildings That Breathe Design Guide, also reflects a stand of fig trees which neighbour the building. The facade of the building's first six levels incorporates outdoor spaces which take in the fig trees at base, canopy and tree top. These spaces are breathable, linking the indoor area to the outdoor environment, providing tangible wellbeing benefits for occupants. The upper three levels include a sky terrace that was designed to mimic a cascading garden. NDY designed the mechanical systems to accommodate the breathable facade and the sky terrace.

The building was originally targeted to meet PCA Grade-A, 4.5 Star NABERS Energy, 4 Star NABERS water and 4 Star Green Star building standards, however NDY's sustainability team worked with the client and the builder to achieve a 5 star Green

## Services

Sustainable design strategies, advanced simulation and analysis, verified sustainability certifications

**Client:** Dexus Property Group

**Architect:** BVN Architecture

**Completion:** 2020

Star rating. This was achieved through the early identification in the design process that the building could be awarded 5 star status through the strategic targeting of additional Green Star points in the design.

The team focused on reduction of water consumption in the building's design through a performance pathway to obtain valuable points. Additionally the architectural vision of reflecting the neighbouring fig trees was used to incorporate aspects of other sustainability ratings tool, namely the beauty element of the Living Buildings Challenge, into the Green Star assessment.

NDY also developed tenant fitout guidelines, which not only helped achieve the final points required to achieve a 5 star rating, but ensured that the vision DEXUS had to deliver a sustainable asset would be realised through the reduced impact of tenant operations in the building.

[Read more](#)







Offices, Australia

# 435 BOURKE STREET

Melbourne, VIC

435 Bourke St will set a new benchmark for sustainable office development and design, being one of the first office towers in the world to feature a “solar skin” facade. The tower is proposed to comprise approximately 60,000 m<sup>2</sup> of premium commercial office space across 48 levels, with 1,300 m<sup>2</sup> of retail space, a sky garden and several landscaped open-air or mixed-mode terraces. The commercial precinct is anticipated to serve as a “vertical village” for more than 5,500 city workers.

435 Bourke Street will be a significant and pioneering project for the city that responds to a future Melbourne workforce, with sustainability, wellness, connection to nature and productivity emphasised in the building's design and performance.

NDY's sustainability team has been engaged by Cbus Property as part of a multi-disciplinary NDY team to perform the lead sustainability role on the project. NDY's advisory work with Cbus Property for GRESB and environmental reporting has enabled our team to understand how this project relates to their ESG agenda.

A large focus for this project has centred on the façade arrangement, for which NDY has

## Services

Sustainable design strategies, advanced simulation and analysis, zero carbon action plans, verified sustainability certifications, whole-of-life carbon assessments, resiliency risk assessment and adaptation planning, renewable energy solutions

**Client:** Cbus Property

**Architect:** Bates Smart

**Completion:** Ongoing

collaborated extensively with Bates Smart to optimise each elevation through parametric testing of multiple concept options. Careful consideration of external issues such as views and overshadowing, along with a focus on superior indoor environment quality, has resulted in a unique design outcome for the Melbourne skyline.

In line with Cbus Property's commitment to Net Zero Carbon, which has been fast-tracked to 2022, 435 Bourke is designed to achieve Net Zero Carbon in operation, with 20 per cent of its fully electric base building electricity requirements generated on site by its solar skin design. The balance of the building will be powered by off-site renewable electricity.

The project has world-leading sustainability targets including:

- 30% reduction in upfront carbon
- 6 star Green Star Buildings
- 5.5 star NABERS Base Building Energy
- 4.5 star NABERS Whole Building Water
- 5 star NABERS Indoor Environment Quality
- WELL v2 Platinum.



Education, Australia

# PICAC NARRE WARREN

Melbourne, VIC

## Services

Advanced simulation and analysis, zero carbon action plan, renewable energy and storage solutions

**Client:** The Plumbing Industry Climate Action Centre (PICAC)

**Architect:** FMSA Architecture

**Completion:** 2019

Watch the project timelapse video:

[Watch now](#) 

PICAC Narre Warren is Victoria's first all-electric Net Zero Energy (NZE) education and research facility, providing vocational training to support Victoria's construction industry. The innovative facility focuses on new technology, risks and approaches and teaches everything from mechanical and gas installation to health and safety programs.

With climate change rapidly impacting our planet, NDY's expertise in engineering and sustainable buildings led to our engagement and the delivery of a leading sustainability approach. Following extensive research in sustainable building trends, our team proposed an ambitious NZE strategy to demonstrate real leadership and be consistent with our client's educational goals – and then helped to secure grant funding for the project from ARENA (the Australian Renewable Energy Agency).

The renewable energy supplied on the site is a unique combination of geothermal energy wells and solar panels. According to NDY's sophisticated energy modelling, on an annual basis this will provide enough energy to match the usage demand of the entire building.

The energy wells are a combination of very deep (110m) and moderate depth (13m) screw bore piles which maximise the geothermal supply on the site.

With strong passive design as its foundation (which NDY's sustainability team helped FMSA Architecture to develop), the building utilises indirect evaporative cooling units, relaxed temperature conditions, in-slab heating, and ground-source heat exchange loops integrated into the structural piles. 770 rooftop solar PV panels then generate the same amount of energy each year as the building consumes, completing the energy supply strategy.

Extensive advanced simulation modelling predicted the energy demand of the building utilising different servicing approaches, and assessed the energy generation potential of the rooftop solar PV array. The complexity of the modelling varied as the design evolved, with hourly data throughout the year interrogated so that a deep understanding of the main contributors to the heating and cooling requirements could be sensitivity tested. Design adjustments were made progressively to arrive at an overall design that achieved equality of building energy demand and renewable energy supply, and at acceptable cost. Minimising the building energy demand through critical examination of the building's requirements and matching the most suitable low-energy systems to these requirements was an important part of the modelling process.





Education, Australia

# BOOLA KATITJIN

Perth, WA

## Services

Sustainable design strategies, advanced simulation and analysis, verified sustainability certifications, whole-of-life carbon assessments, resiliency risk assessment and adaptation planning, renewable energy solutions

**Client:** Murdoch University

**Architect:** Lyons

**Completion:** 2023

Boola Katitjin provides Murdoch University with approximately 16,000 m<sup>2</sup> of contemporary collaborative learning space, informal peer-to-peer learning, academic workplace and campus landscape. The building also contains a new campus wide Student Services Hub and a series of innovative 'future focused' research and industry engagement spaces. The project is a demonstration of the University's commitment to sustainable practices and design innovation.

The primary purpose of the project was to provide the University with state-of-the-art contemporary learning spaces, to meet the needs of contemporary higher education.

Designed to achieve a 6 star Green Star Design and As-Built v1.3 rating, the project demonstrates leadership in sustainability on a national scale.

NDY worked closely with the architect and facade consultant, through an iterative modelling process, to ensure the building's architecture will passively control solar gains to minimise cooling energy and enhance thermal comfort, incorporating deep eaves to the north, vertical fins to the southern facade, and horizontal fins to the eastern and western facades. The combination of smart and informed passive design

and high performance building fabric results in Boola Katitjin exceeding NCC Section J 2019 performance requirements by 10% and resulting in a 90% reduction in greenhouse gas emissions when modeled under Green Star protocol.

Wind microclimate and thermal comfort studies informed the architectural and mechanical design and enabled the use of mixed mode ventilation to select areas for 40% of the year, further reducing energy consumption.

The project team prioritised reduction of embodied carbon in construction materials resulting in a hybrid, mass timber construction for the majority of the structure, the largest in Western Australia so far. Mass timber construction not only reduces new carbon emissions entering the atmosphere but sequesters carbon from the atmosphere as it grows.

NDY has developed a strong understanding of Murdoch's appetite to push boundaries in sustainability in the built environment and has delivered the expertise required to design a world leading sustainable building.





Offices, New Zealand

# 2DEGREES HEAD OFFICE

Auckland

## Services

Verified sustainability certifications,  
workplace policy development

**Client:** 2degrees

**Architect:** Warren and Mahoney

**Completion:** 2022

2degrees is one of New Zealand's (NZ) leading telecommunication companies. They are driven by their purpose of 'Fighting for Fair to make NZ a better place to live', which stems back to their inception in the early 2000s where they became the country's third mobile provider and halved costs for Kiwis overnight.

People and wellbeing are integral to the 2degrees culture, and when moving into their new Auckland headquarters the organisation took the opportunity to demonstrate this commitment to providing a happier and healthier workplace through certification under The WELL Building Standard (WELL).

2degrees approached NDY to help guide their organisation through the WELL journey. Their new headquarters is the first project in NZ to achieve WELL certification, becoming WELL Certified™ Platinum in May 2022.

Design interventions that support employee health, safety and wellbeing include:

- Kaiterra Sensedge air quality monitors located throughout the fitout, taking live measurements of indoor air quality and thermal comfort levels, with results displayed in the office lobby and on an employee accessible website

- Personal workspace comfort adaptation with access on request to task lighting, blankets for warmth, desk fans for cooling and noise cancelling headphones
- Influencing staff use of internal stairs for inter-tenancy movement with aesthetic stair networks and encouraging signage
- Restorative areas for Hauora (wellness) including the Harikoa room for meditation, prayer and yoga.

2degrees' internal operations and staff policies, whilst already outstanding, were also elevated with initiatives such as:

- Commitment to responsible sourcing of food available to staff with at least 50% of all fruit and vegetables and 25% of all animal products being certified organic
- Driving education on smoking prevention and smoking cessation support for staff and their families
- Revamped parental leave policy offering some of the strongest opportunities for new parents in the NZ workforce
- extensive wellness programme provides people with the ability to claim a gym visit back when travelling and access to programmes to support their mental health.



Hotels, New Zealand

# THE HOTEL BRITOMART

Auckland

## Services

Sustainable design strategies, advanced simulation and analysis, verified sustainability certifications

**Client:** Cooper and Company

**Architect:** Cheshire Architects

**Completion:** 2020

For more than 15 years, Cooper and Company has been patiently regenerating the 9-block Britomart neighbourhood in the heart of Auckland's downtown waterfront. It's a place where a blend of heritage and contemporary buildings now houses a working community of over 5,000 people and offers some of Auckland's best eating, drinking and shopping.

The Hotel Britomart was designed as a place from which to enjoy all the amenities of the Britomart neighbourhood and the city beyond. NDY delivered full building services on the development, including an industry-leading sustainability offering. Our team provided design solutions for the new build, 10 storey hotel and the accompanying transformation of the adjacent historic Buckland Masonic building, an existing site first built in the 1800s, into an office building.

New Zealand's first 5 Star Green Star certified hotel has been designed to the highest standards of sustainability for building and construction. Working closely with Cheshire Architects and Cooper and Company, an organisation with a passion for sustainability that is in line with our own, NDY delivered the sustainability solutions that were a driving force behind the development's realisation.

After research was obtained for the certification process, findings showed more than 2/3rds of travellers would prefer to stay in eco-friendly accommodation. To keep the project in line with these findings, initiatives included nearly 80% of the construction and demolition waste being re-used or recycled during the 2-year build, and 70% of the water used for concrete coming from recycled sources. Material selection was imperative to the success of the sustainability goals, with locally sourced sustainable timber and recycled bricks used in the build.

There were 2 key services considerations for NDY during the design phase: limited plant space and the placement of building services in hotel rooms. To overcome spatial problems relating to the mechanical plant, NDY sourced chillers from numerous manufacturers and found only one that would meet the building's demand and load whilst fitting into the tight plant area.

Ultimately The Hotel Britomart is a smart, contemporary location that offers a respite to its guests through luxurious and sustainable rooms while reducing the impact of climate change and enhancing health and wellbeing for guests and hotel staff alike.



The background of the slide is a photograph of a modern office lounge. On the left, there's a yellow sofa with a patterned cushion. In the center, a woman with brown hair, wearing a floral top, is sitting at a round wooden table, looking towards the right. The room has a colorful geometric mural on the wall, featuring a parrot and bananas. A string of white spherical lights hangs from the ceiling. The overall atmosphere is bright and contemporary.

# OUR HEALTHY WORKPLACE ADVISORS HELP YOU **ATTRACT AND RETAIN TOP TALENT**

Heighten productivity, uncover operational efficiencies and create a better place to work. We apply global know-how to local situations so you can access sustainability solutions designed to help your workplace perform the way you need it to. Our evidence-based recommendations start early and continued consultation enables the design to support your organisational health and wellbeing goals.

# OPERATIONS AND ASSET REPOSITIONING

We value existing buildings. In a world of finite resources, the imperative to build less is becoming more and more prevalent. The increase in tenant organisations pursuing net zero targets means there is more scrutiny on the buildings they occupy. The most sustainable building is one that nurtures the relationship between people and planetary health, striking not only a balance but improved outcomes in social and environmental sustainability.

We work with you to reposition your assets and increase sustainability credentials. We focus on operational actions to ensure comfort and productivity remain high while resource consumption is continually minimised.

## BUILDING MONITORING, AUDITING AND TUNING

Any roadmap requires a process of validation in implementation to confirm that the anticipated emissions reduction or offset targets are being met.

NDY has considerable experience in the process of building tuning, both for new build and refurbished physical assets, using project-specific benchmarks to monitor performance over time and identify any areas requiring further attention to deliver optimum performance in collaboration with facilities management and contractors. We also use [NABERS](#) and international energy audit standards as recognisable and verified approaches to monitor and audit performance.

Collaborating with our smart buildings team, opportunities for new sustainability initiatives in existing buildings are endless. Using data blended from various sources, we measure, track and verify building performance and accurately align operations to user needs. This real time data provides us opportunities to influence outcomes rather than seeing performance retrospectively.

## OPERATIONAL AND MAINTENANCE ACTION PLANS

Often, our monitoring, auditing and tuning services will result in the need for a clear operational and maintenance action plan.

We provide action plans for facilities managers with clear short, medium and long-term objectives to prioritise efficient and low carbon operations. This may include inspection and audit schedules, tuning benchmarks, plant replacement strategies and sustainable procurement considerations.

## ZERO CARBON ACTION PLANS

We provide zero carbon action plans for precincts and buildings with clear actions to achieve zero carbon. This starts with design and follows into procurement, construction and operation.

Our plans future-proof buildings to accommodate any future additional loads, energy storage or demand response solutions which may occur or be implemented during a building's lifetime. We also consider end-of-life scenarios and provide insight into future solutions for carbon risks such as back-up generation and refrigerants.





## VERIFIED SUSTAINABILITY CERTIFICATIONS

We believe that a robust design framework or certification can help ensure a project's environmental and social sustainability aspirations are realised in design, construction and operation.

We offer formal management and administration against all industry recognised sustainability certification schemes including [Green Star](#), [BREEAM](#), [LEED](#), [NABERS](#), [WELL](#), [Passive House](#) and [Living Building Challenge](#).

## WORKPLACE POLICY DEVELOPMENT

Clear workplace policies and procedures provide governance and communicate an organisation's commitments along with supporting employees' physical and mental wellbeing. They can make adopting and maintaining healthy behaviours easier and create and foster a positive company culture.

We can help you review existing policies, identify gaps and develop workplace policies and processes to support in the achievement of verified sustainability certifications, such as WELL, or generally improve your organisation's performance. Both certification and improved organisational performance will contribute to an increased GRESB score.



Offices, Australia

# 500 COLLINS STREET

Melbourne, VIC

## Services

Verified sustainability certifications, workplace policy development

**Client:** Kamrice

**Completion:** 2021

Completed in 1973, 500 Collins Street is a 26-storey tower featuring approximately 26,000 m<sup>2</sup> of net lettable area comprising an office tower with a retail plaza at ground level. 500 Collins Street is the first existing building in Australia to achieve WELL Certification™ at the Platinum level, positioning it as an industry leader in the advancement of health and wellbeing in existing buildings.

NDY was initially engaged to undertake a gap analysis of the building to determine the potential to achieve WELL certification. Following a positive result, NDY led Kamrice through full certification, assessing the building's design, operations and policies under the internationally recognised WELL Building Standard.

500 Collins Street earned the Platinum distinction based on its performance across the 10 categories of the WELL Building Standard – air, water, nourishment, light, movement, thermal comfort, sound, materials, mind and community.

To achieve this certification the building underwent rigorous testing on its air quality, water quality, ventilation, thermal and acoustic comfort.

Other initiatives include the use of non-toxic cleaning products, mindful eating promotion through a healthy vending machine, and the creation of an online tenant portal to share nutritious recipes and promote mental health.

The certification demonstrates how an older, existing building in which investment and upgrades has been consistent and focused over the years, was able to achieve recognition at the highest level without requiring top to bottom refurbishment.

**Mark Ross, Managing Director of Kamrice, states “500 Collins Street sets a benchmark in how existing office buildings can be transformed to lead the way in workplace health and wellbeing, for both small and large tenants alike.”**





Offices, New Zealand

# ENERGY EFFICIENCY ON EXISTING BUILDINGS

Auckland & Wellington

## Services

Building monitoring, auditing & tuning,  
verified sustainability certifications

**Client:** Precinct Properties

**Completion:** Ongoing

Precinct Properties is the largest owner and developer of premium inner-city office real estate in Auckland and Wellington, New Zealand. Committed to delivering a premium product with a reduced carbon footprint, Precinct Properties has set targets in their publicly disclose sustainability reporting for both new and existing building stock to achieve NABERSNZ thresholds. These commitments in line with NABERSNZ also supports Precinct's wider benchmark reporting such as the TCFD framework, Toitū enviocare, GRESB and MSCI ESG Ratings.

Over time NDY has played a pivotal role in helping Precinct Properties realise these targets from both a design contribution of new developments and the optimisations of existing assets. To unlock the sustainability potential of Precinct's existing building stock, NDY have worked alongside Precinct to firstly rate the buildings against NABERSNZ and secondly interrogate the operational performance.

To do this NDY has undertaken a series of energy audits across a select number of buildings in Wellington. These audits involved site investigations and liaising with facilities management, contractors, energy providers and NDY's in-house services and digital infrastructure experts to interrogate the operational data and offer opportunities to improve performance. This exercise

put a spotlight on not only the power of data accuracy and metering integrity, but also the opportunities that exist in continual system tuning. Precinct Properties have executed several of NDY's recommendations and are seeing immediate reductions in building energy consumption.

Further to auditing the performance of existing buildings, NDY have conducted annual NABERSNZ ratings on a number of these buildings. NABERSNZ ratings allow a building to be benchmarked against others in the market. Precinct's maturity in reporting against NABERSNZ is in line with that observed in Australia and prepares them for regulatory NABERSNZ reporting and disclosures if/when introduced in New Zealand.



Sport & Entertainment, New Zealand

## EDEN PARK

Auckland

### Services

Workplace policy development, verified sustainability certifications

**Client:** Eden Park Trust

**Completion:** 2021

Eden Park is New Zealand's national stadium and the first stadium in Australasia to achieve the globally recognised WELL Health-Safety rating. Revered around the globe as the spiritual home of New Zealand sport, the venue hosts a range of content from sports to concerts and community, arts and cultural events.

Throughout 2021 in the midst of the COVID 19 pandemic, Eden Park was cast under a global spotlight, both as one of the only stadia operating globally through the year, and having recently being ranked as the number one concert venue in the world by Pollstar.

As WELL Accredited Professionals, NDY took the globally recognised stadium on the WELL Health-Safety journey. WELL Health-Safety provides a platform to recognise, promote and in some cases bring facilities and buildings 'up to spec' to provide clean, safe, healthy and prepared spaces for occupants to return to across the world. The WELL Health-Safety Rating benchmarks the performance of facility against the following categories:

- cleaning and sanitisation procedures
- emergency preparedness programs
- health services resources
- air and water quality management

- stakeholder engagement and communication.

The project also delivered:

- improved cleaning practices
- emergency preparedness and business continuity plans
- smoke-free environment.

Eden Park is proud to be leading the industry with this global WELL Health-Safety Rating.

**“Our venue has always placed the highest importance on health and safety, so receiving the WELL Health-Safety seal just confirms that Eden Park is setting the standard for stadium buildings and public spaces across Australasia,” said Eden Park Chief Executive Officer, Nick Sautner.**



# OUR MARKETS

We design spaces that perform the way you need them to – spaces fit for your future. Whatever the size or complexity of your project, our global team of trusted advisors engineer integrated and sustainable solutions.



**AGED CARE**



**CORRECTIONS & JUSTICE**



**DEFENCE**



**EDUCATION**



**HEALTH & SCIENCES**



**INDUSTRIAL**



**MISSION CRITICAL**



**OFFICES**



**RESIDENTIAL, HOTELS  
& MIXED-USE**



**RETAIL**



**SPORTS, ENTERTAINMENT  
& PUBLIC BUILDINGS**



**TRANSPORT**

# OUR SERVICES

Our project teams include technical specialists who span disciplines but share the same project goals, values and vision.



Acoustics



Asset Performance



Audio Visual



BIM Building Information Modelling



Commissioning Management



Communications (ICT) Consultancy



Controls & Integration



Electrical



Fire Engineering



Fire Protection



Hydraulics



Interiors



Mechanical



NDYLIGHT



Property Consultancy



Security



Smart Buildings



Structural & Civil



Sustainability



Vertical Transport



# NDY AT A GLANCE

We tap into a well-resourced network of technical specialists and consulting engineers from around the world to bring you the best project team.



## MAKING SPACES WORK

# CONTACT US

## AUSTRALIA

### ADELAIDE

T: +61 8 8290 6800  
E: [adelaide@ndy.com](mailto:adelaide@ndy.com)

### BRISBANE

T: +61 7 3120 6800  
E: [brisbane@ndy.com](mailto:brisbane@ndy.com)

### CANBERRA

T: +61 2 6295 1788  
E: [canberra@ndy.com](mailto:canberra@ndy.com)

### GOLD COAST

T: +61 7 5512 1235  
E: [goldcoast@ndy.com](mailto:goldcoast@ndy.com)

## MELBOURNE

T: +61 3 9862 6800  
E: [melbourne@ndy.com](mailto:melbourne@ndy.com)

### PERTH

T: +61 8 9281 6800  
E: [perth@ndy.com](mailto:perth@ndy.com)

### SYDNEY

T: +61 2 9928 6800  
E: [sydney@ndy.com](mailto:sydney@ndy.com)

## CANADA

### VANCOUVER

T: +1 604 734 9338  
E: [vancouver@ndy.com](mailto:vancouver@ndy.com)

## NEW ZEALAND

### AUCKLAND

T: +64 9 307 6596  
E: [auckland@ndy.com](mailto:auckland@ndy.com)

### WELLINGTON

T: +64 4 471 0151  
E: [wellingtonadmin@ndy.com](mailto:wellingtonadmin@ndy.com)

## UNITED KINGDOM

### LONDON

T: +44 20 7553 9494  
E: [london@ndy.com](mailto:london@ndy.com)

## IRELAND

### DUBLIN

T: +353 1 264 6995  
E: [dublin@ndy.com](mailto:dublin@ndy.com)

Join us on social media at  
[www.ndy.com/followus](http://www.ndy.com/followus)



**CONFIDENTIAL INFORMATION:** This document is given with the understanding that the information within is private. Please keep it confidential and don't share with anyone else. Take proper care to make sure that others can't see or access this document. It's meant only for you.

**DISCLAIMER OF LIABILITY:** The information in this document is provided under direction of the client and follows their instructions. Any third party reviewing the content should make their own assessment on whether the information is appropriate to them. NDY makes no assurance the information meets the needs of a third party and does not accept liability for any loss or damage incurred by third parties as a result of using the information.

**COPYRIGHT © NDY Group 2023:** No part of this document can be copied or sent without written permission from NDY. All rights are reserved.