



Green Business: Australia
A Faculty Development in Sustainable Business (FDSB) Program

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INTRODUCTION

The University of Connecticut and San Diego State University Centers for International Business Education and Research (CIBER) hosted its “Green Business: Australia” Faculty Development in Sustainable Business (FDIB) program from January 4-15, 2016. The goal of the program was for participants to learn how Australian businesses are incorporating sustainable development strategies for environmental, social, and economic benefit. During the 12-day program, participants visited businesses across the country’s East Coast, attended lectures and engaged in discussions with faculty from the University of Queensland (UQ) Business School—UConn’s *Universitas 21* partner—and explored areas of environmental, cultural, and historical importance.

During their stay in Brisbane, the group was hosted by the UQ Business School. Head of the School and Academic Dean Andrew Griffiths, one of the first scholars in the world to study corporate resilience and adaptation to long-term global climate change, spent a considerable amount of time with the group, offering perspectives on industry sustainability and sharing strategies for integrating sustainability topics across the business school curriculum.

The group was well looked after by UQ’s Institute for Continuing and TESOL Education (ICTE), who handled the logistics for the program. At a farewell dinner held at UQ, Dean Griffiths, along with ICTE representatives, presented FDIB participants with a Certificate of Completion for the *Green Business: Australia* professional development program.

This white paper offers an overview of the group’s learning opportunities with UQ’s Dean Griffiths, as well as other sessions with the UQ Business School, numerous industry visits during the 2-week program, and a range of cultural excursions.

II. SUSTAINABILITY & UNIVERSITY OF QUEENSLAND (UQ)

Sustainability & UQ Business School (UQBS)

Andrew Griffiths, Dean of the University of Queensland Business School and a preeminent scholar in corporate sustainability, discussed numerous aspects of sustainability with FDIB participants during their week on UQ’s St. Lucia campus. Because of his generosity with his time and expertise, participants expressed high degrees of confidence and enthusiasm as they prepare to integrate sustainability issues into their respective courses and curricula upon returning to their home institutions.

Griffiths used a central question to frame his first session with participants: *Can a business case be made for sustainability?* While most businesses takes their cues from Milton Friedman and simply focus on economics and the “bottom line,” Griffiths

argues that increasing degrees of complexity and increasing discontinuities require businesses to rethink their organizational models and the ways that they measure and communicate the value they offer to shareholders, the communities in which they operate, and the greater world.



A more dynamic and responsive model of sustainable development, Griffiths suggested, is one that recognizes equally the economic, social, and environmental aspects of value creation. Often referred to as the “triple bottom line,” this model encourages businesses to benefit many constituencies, and not exploit or endanger any group of them. Analogous to a three-legged stool, a business that operates sustainably—in order to thrive—must necessarily attend to all “legs” equally; otherwise, the stool becomes unstable and ceases to function.

To help businesses appreciate the need for sustainable development, Griffiths offers these propositions:

- ✦ **“The Emotional Case.”** This proposition focuses upon ecological threats and triggers emotional responses. While short-term responses can be strong, businesses can quickly become cynical with respect to long-term capacity and value creation. Eliciting emotional responses can help generate initial interest, but discussions of long-term implications must be persuasive.
- ✦ **“The Economics Case.”** This approach encourages businesses to consider the amount of risk to which they expose themselves, be they weather-related disasters or the 2005 Carbon Disclosure Project (i.e., a “name-and-shame” effect).

- ✦ **“Industrial and Social Adjustment Case.”** This proposition underscores that industrial accidents and irresponsibility involves social costs to individuals, communities, and the environment.
- ✦ **“The Business Opportunity Case.”** In some cases, businesses will create products, services around adaptive needs and, in so doing, go beyond usual metrics of cost effectiveness.
- ✦ **“Human and Social Dimension”** and **“Ecological Dimension”** These approaches emphasize capacity building and the ways in which both internal and external stakeholders are treated.

As these propositions suggest, the continuum of business sustainability—the degree to which businesses recognize the benefits of sustainable development—is wide. Some businesses may either reject outright or be non-responsive to adopting sustainable practices. Meanwhile, other businesses may assume a position of sustainable compliance, satisfied to alter practices to conform to legislative and regulative minimum standards. However, more efficient businesses will integrate more sustainable practices, recognizing that such responsiveness “makes good business sense.” Finally, businesses that strategically engage in sustainable development—a range of which FDIB participants visited during their 2-week experience—clearly make sustainability central to their corporate mission, values, and principles.

“Everyone has a sphere of influence. No one’s is any less important than any one else’s... it’s just that no one person can have optimal reach.”

Andrew Griffiths, Dean, University of Queensland Business School

On March 11, 2008, Australia officially joined the Kyoto Protocol, a historic measure that induced many businesses and organizations to explore sustainable development with heightened attention. An international agreement obtained in 1997 and ratified by 178 countries, the Kyoto Protocol seeks to reduce global greenhouse gas emissions by requiring developed countries to meet national targets for greenhouse gas emissions. Further, developed countries are required to take domestic action to reduce greenhouse gas emissions; countries that fail to meet their emissions reduction targets may be liable to significant penalties.

In accord with the Kyoto Protocol, countries are also required to take on a range of monitoring and reporting commitments. Griffiths shared that many businesses across Australia then saw a need to account more accurately for their greenhouse gas emissions, considering these types of questions:

- Could emissions be avoided? If so, would it be possible to stop generating emissions completely?

- Could business activities be changed in order to reduce emissions? If so, in what ways could we improve energy efficiency of our activities? Or, to recover from existing processes, are there possibilities for waste-to-energy alternatives?
- Could emissions be reduced through natural or artificial sequestration (i.e., carbon capture and storage)?
- Could residual emissions be offset? Possible to reduce greenhouse gas emissions at one source by investing in similar emissions reductions elsewhere (e.g., renewable energy, energy efficiency, reforestation)?

To help ensure the integrity of approaches like sequestration or offset options, carbon accounting emerged as a method for ensuring the integrity of these approaches. Carbon accounting helps businesses identify, calculate, and analyze greenhouse gas emissions. A typical carbon accounting audit allows businesses to identify policy and long-term changes that they will need to incur—as well as examine strategic weaknesses and R&D decisions—so they may meet two types of greenhouse gas emissions targets: **absolute targets** that must be met over time, and **intensity targets** that require businesses to reduce the ratio of emissions relative to a business metric over time.



Griffiths shared with FDIB participants that “carbon is the Trojan Horse of sustainability,” and business schools can position themselves to help students, industry partners, and stakeholders to increase their “carbon literacy,” as mandated greenhouse gas emissions standards require new forms of accountability.

For businesses seeking to become more sustainable through enhanced accountability and strategic planning, there are varying degrees to which businesses can respond:

- ✦ A focus on **compliance** will help businesses reduce the risk of sanctions for failing to meet minimum standards;
- ✦ A focus on **efficiency** suggests a growing awareness that there are real advantages to be gained by proactively instituting sustainability practices;
- ✦ A **strategic, proactive** stance uses sustainable development to improve competitive advantage and ensure longer-term corporate profitability by positioning a firm as a leader in sustainable business practices and—in the process—adding value and maximizing speed, flexibility, innovation, and responsiveness.

Because future sustainability leaders will require a particular mindset—one that, as Griffiths noted, is capable of “swimming in the complexity of problems”—it behooves business schools to consider how they can prepare these leaders to skillfully tackle these types of emerging issues:

- designing, implementing operational efficiencies that lead to innovation
- encouraging behavioral changes aligned with sustainability (e.g., fuel efficient driving, reviewing business travel requirements)
- managing energy demand (e.g., electricity generation efficiency and transmission line capacity)
- persuading suppliers to meet changing corporate expectations
- understanding carbon intensity of business models
- building organizational resilience for future climate change

“Climate change is a diabolical policy problem. It is harder than any other issue of high importance in living memory.”

Andrew Griffiths, Dean, University of Queensland Business School

UQ Business School offered its first course in sustainability in 2005, and the school offers a rich range of courses in sustainability across both undergraduate and graduate levels. Examples of courses include: Corporate Sustainability Strategy, Innovation and Sustainability, Decision Making for Sustainability, Public Policy/Political Environments and Sustainability, Competitiveness in a Carbon-Reduced World, and Carbon Accounting. These courses are offered for students interested in transforming the carbon culture of their future organizations, and the long-term goal of UQ’s Business School is to link sustainability offerings with entrepreneurship and innovation.

UQ Solar Array

UQ's rooftop solar array is the largest of its kind in Australia. This solar array, which provides between 5-6% of peak electricity demand at UQ's main campus in St. Lucia campus, reflects UQ's commitment to reducing carbon emissions and increasing its use of renewable energy.

UQ's solar array generates 1.22 megawatts of power from the sun, harvested from over 5,000 polycrystalline silicon solar panels distributed across four building roofs: two multi-level parking garages, the UQ Centre, and the Sir Llew Edwards building. Froome explained that the array, almost 25% larger than any other flat-panel arrays in Australia, has been set up with two identical grids—one feeding into a zinc-bromine storage battery and one directly into the general power grid—to allow researchers to study how best to feed electricity into grids from stand-alone generating plants that produce solar or other alternative energies.



The system saves considerable greenhouse gas emissions, estimated at around 1750 tons annually, or the equivalent of taking 335 cars off the road each year. The UQ Solar project at St Lucia had a total cost of \$7.75 million, including the array, construction of a visitor resource centre, the data management web interface, and ancillary research programs.

Like many other alternative energy sources, a challenge with solar power is inconsistency: when it is cloudy, less power is produced. To address this inconsistency, the UQ solar array panels have been set up to allow researchers to experiment with different ways of storing and collecting energy consistently, and to

determine how best to feed energy from stand-alone generating plants into the electricity grid.

The UQ solar array is enhanced by its strong industry partnerships, including research agreements with several world-leading companies in renewable power. These agreements and partnerships have provided UQ with research opportunities unparalleled in Australia and positioned Queensland at the global forefront of renewable energy research.

UQ Sustainability

Geoff Dennis, UQ's Deputy Director for Sustainability, met with participants to discuss UQ's deliberative actions to become a global leader in sustainable development among higher education institutions. UQ recognized the myriad of benefits it would reap by leading this change, including cost savings for energy projects, a stronger ability to recruit high quality staff and students, and recognition through compliance with Australia's Federal Clean Energy Future Plan.

Dennis noted that "sustainability" is a term that invokes hundreds of definitions, thereby encouraging UQ to adopt an understanding of sustainability that included not only environmental stewardship, but also social and economic dimensions as well. With this more comprehensive and inclusive definition, UQ's understanding of sustainability is akin to the concept of sustainable development set forth in the 1987 Brundtland Commission.

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Brundtland Commission, 1987

UQ's Clean Energy Future Plan rests on four pillars—carbon pricing, energy efficiency, renewable energy, and carbon farming—and five carbon objectives:

- To align climate action with institutional strategic plans
- To minimize greenhouse gas emissions and the cost of energy and carbon
- To position UQ as a leader in climate action among all stakeholders
- To lead change and innovation towards a sustainable low carbon future
- To use the UQ estate as a "living laboratory" to demonstrate climate action initiatives in practice

UQ also demonstrated its commitment to sustainable development by signing the Taillores Declaration (TD) in 2009. Composed in 1990 at an international conference in Taillores, France, the TD is the first official statement made by university administrators of a commitment to environmental sustainability in higher education. A ten-point action plan, the TD incorporates sustainability and environmental literacy in teaching, research, operations, and outreach at colleges and universities. To

date, over 350 university presidents and chancellors in over 40 countries have become TD signatories.



Moreover, Dennis shared that UQ has committed to the “*Universitas 21* Statement for Sustainability,” a pledge for sustainable development that commits institutions to develop, publish, and monitor targets; share results with other U21 institutions; engage in research towards a sustainable future; establish the university campus as a living laboratory for a sustainable future; emphasize citizenship and engagement to promote volunteerism; and build capacity through cross-network collaboration and work.

Through a variety of committees, working groups, and programs, UQ is striving to achieve its commitments under both the Talloires Declaration and the *Universitas 21* Statement for Sustainability.

III. SITE VISITS & INDUSTRY SPEAKERS

Perfect Potion

In Sydney suburb Bondi Junction, participants visited with Perfect Potion's Salvatore Battaglia, who gave the group a tour of one of his retail stores and shared ways that he and co-founder Carolyn Stubbin have made sustainability central to their product development and product positioning, as well as to their future growth plans.



In 1991, Battaglia and Stubbin, both of whom share backgrounds in natural therapies and aromatherapy, started Perfect Potion, a retailer of certified natural and organic skincare and body care products designed to nurture the body, mind, and spirit. Conceived as a “21st century Bohemian apothecary and sanctuary for the senses,” Perfect Potion has designed its retail space using a range of natural materials and natural lighting that underscore its commitment to sustainability. With a strong presence in niche markets across Australia and Japan, Perfect Potion looks forward to both continued growth in Asia and establishing its presence in Europe and North America.

In its continued efforts to establish links between optimal health and sustainability, Perfect Potion adheres to a rigorous set of standards that ensure respect for the environment and an appreciation of finite resources, including the use of certified, organic materials. Of note, the company has received a Certified Natural Cosmetics endorsement, one of the highest global standards for natural and organic cosmetics.

Lend Lease

Lend Lease is a leading global property and infrastructure solutions provider that seeks to create the best sustainable places through assets and infrastructures that they find, buy, fund, design, build, and manage. Located at the Bond (recognized as one of

Australia’s greenest office buildings) in Sydney, Lend Lease—who proudly claims “sustainability is in our DNA”—identifies its key strength as knowing how to increase both the environmental and social benefits of its acquisitions without compromising the economic bottom line. Current Lend Lease projects—including Darling Quarter, The Gauge, and Forte (the world’s largest timber apartment building complex)—underscore this “triple bottom line” approach that helps create positive legacies for future generations.

“Companies must start justifying their worth to society, with greater emphasis placed on environmental and social impact rather than straight economics.”

Dick Dusseldorp, Founder of Lend Lease (1973)

Lend Lease’s “Open Plan” is a new “blueprint” that helps communicate the importance of sustainability to internal and external stakeholders. Specifically, this plan features an integrated, unified message that foregrounds the economic, environmental, and social benefits across its various projects. Importantly, this plan is considered “open” in that it invites conversation and an appreciation for new ways of thinking.



Lend Lease’s Open Plan is comprised of three specific focus areas:

- ✦ *Future Ready* (“We will future ready the built environment”), an area that addresses governance and responsible investment, climate change, innovation, and value creation;

- ✦ *Respect for Resources* (“*Resources we use will be recycled, responsible, and reusable*”), including materials and supply chain matters, the natural environment, and provisions for carbon, energy, water, and waste;
- ✦ *Sustainable Lifestyles* (“*What we create will leave a positive social legacy*”), with particular attention to diversity and culture, employment skills, community creation, as well as safety, health, and well-being.

In their tour of the Bond facility, FDIB participants had an opportunity to experience how sustainable design contributes to healthy and productive workplaces. Ample space, an abundance of natural light, non-toxic finishes and bamboo flooring, as well as rooftop gardens all collectively illustrated that sustainability failed to compromise—and, in many ways, enhanced—structural aesthetics. Moreover, the workspaces themselves enabled richer collaboration and healthier lifestyles that encouraged movement. In many ways, the Bond captured one of Lend Lease’s long-term visions—“Beyond the Buildings”—in that the structure itself was designed to complement nature, as made evident by outdoor spaces available to all, diverse landscaping, water frontage, and green roofs and walls.

Barangaroo South Development

With its Barangaroo South project, Lend Lease has recognized a unique opportunity to underscore Lend Lease’s sustainability leadership. The delivery phase of this \$6 billion transformation began in 2010, when Lend Lease signed the Development Agreement for Barangaroo South.

Barangaroo South is a globally significant site for redevelopment on many fronts. Located on Sydney Harbor within the core of Sydney’s central business district, Barangaroo South is one of 17 global sites listed on the Clinton Climate Initiative. Also, the site is a globally recognized “Green Precinct,” comprised of 490,000 square miles on 7.8 hectares. In addition to its strategic location, the site is also optimal for mixed-use development, thereby creating commercial, retail, and residential spaces attractive to visitors, workers, and residents alike.

The Barangaroo South development features an integrated approach to social sustainability, in that social value is celebrated and preserved across numerous drivers: indigenous culture and identity; active and healthy living; art and culture; community investment and services; and community, learning, and reskilling programs. For crew workers signed on to the project itself, sustainability learning is positioned as a workplace learning initiative.

Barangaroo South has also received a Design In Trust endorsement from the United Nations; this endorsement attests to the ways in which this development enacts a sense of trust both in and with others engaged in the community’s development and success. By the time of its completion, Barangaroo South will add an estimated \$1.47

billion of social value to the Australian community, largely through indigenous engagement, sustainability outreach and education opportunities, and cultural development initiatives.

Muru Mittigar

A visit to the Muru Mittigar Aboriginal Cultural and Educational Center, located about an hour west of Sydney, allowed participants to learn about indigenous customs and culture from Aboriginal guides, who offered a series of hands-on learning experiences during the visit. By creating a meeting place for sharing cultures, Muru Mittigar, which means “Pathway to Friends” in the Darug language, offers employment opportunities for Aboriginal people, while also presenting positive outcomes for the local community.

The visit began with a morning tea and native jams, followed by a Koori art painting workshop, during which participants learned about the symbolism and stories reflected in Aboriginal art.

In addition to learning techniques for throwing boomerangs, participants enjoyed a cultural talk with an Aboriginal guide, who discussed indigenous customs and demonstrated the use of tools and instruments, such as emu callers, clap sticks, and the didgeridoo.



Muru Mittigar offers a unique, commercially sustainable Aboriginal organization that makes a significant, measurable, and lasting difference in advancing Aboriginal culture; in so doing, the organization improves the economic and social capacity of Aboriginal people to support themselves in ways that respect their roles as traditional custodians of their culture.

Further, Muru Mittigar is committed to ensuring it maintains and actively develops core, sustainable organizational capabilities, such as overseeing a diverse range of strategically focused business units that operate on a commercially sustainable basis and generate future funding to achieve all aspects of Muru Mittigar’s vision.

Lady Elliot Island Eco Resort

A two-day excursion to the Lady Elliot Island provided an exemplar of a resort that offers a full range of outdoor, educational natural activities, but does so in ecologically sustainable ways that respects environmental constraints.

Lady Elliot, a true coral cay island located at the Great Barrier Reef’s southernmost tip, offered FDIB participants some of the best diving and snorkeling locations on the reef, famous for its amazing array of spectacular marine life, bird life, and white coral beaches. A declared Marine National Park Green Zone, Lady Elliot is one of the most pristine and untouched sections of Australia’s Great Barrier Reef.



In providing visitors with a destination that highlights the reef’s natural beauty and respects the fragile ecosystem of its inhabitants, Lady Elliot considers its mission to be “custodians of this pristine environment.” To help promote this mission, the resort offers visitors’ ample learning opportunities; for example, the resort developed a Climate Change Trail and Tour around the island to highlight the impacts that climate change could have on a coral cay ecosystem.

To operate sustainably without impacting the National Park, Lady Elliot employs a number of measures to protect the environment of the island and its surroundings. For instance, the resort prohibits guests from these types of activities: bait netting, crabbing, harvesting sea cucumbers and aquarium fish, spear and line fishing, and commercial netting.

Perhaps Lady Elliot’s most significant sustainability efforts have been focused on energy conservation and alternative energy sources. In particular, the resort’s “crown jewel” of its eco sustainability efforts has been its hybrid power station, supported by

a full solar panel array that program participants had an opportunity to witness. The hybrid solar power station, completed in 2008, allowed Lady Elliot to reduce fuel burn in excess of 50%. Further, power generated from this station has reduced both day and night peak energy consumption considerably, reducing CO2 emissions by nearly 70%. Supplementing these efforts, the resort has also adopted energy reduction initiatives such as removing clothes dryers and replacing “energy-hungry” appliances with energy-efficient alternatives.

Because of these collective efforts to enhance the resort’s sustainability, Lady Elliot has received numerous awards. Most significantly, the resort achieved the highest level of ECO Certification recognition—“ECO Certified - Advanced Ecotourism”—with Ecotourism Australia, the premiere national body for the ecotourism industry. Tourism operators in Australia who have their attractions or accommodations accredited under this ECO Certification Program can claim to provide an authentic ecotourism product and, in turn, enhance marketing and branding efforts.

UnitingCare Queensland

UnitingCare—comprised of Blue Care, Uniticum Care, and United Health Care—offers a range of residential care, palliative care, and related counseling and wellness services for countless Australians annually. The company sees sustainability as a matter of caring and stewardship, as “improving the quality of life for each and every one of Earth’s inhabitants, in a fair and equitable way, for present and future generations.”

UnitingCare ensures that all employees shared a collective understanding of sustainability and—importantly—recognize that sustainability is everyone’s work, not just the tasks designated to a sustainability officer. UnitingCare’s primary sustainability goal has been to reduce its carbon footprint through more efficient workplace practices; the organization performed eco-efficiency audits to help benchmark its sustainability efforts. Key to these efforts were finding ways to reduce carbon emissions from its vast fleet of vehicles; as just one example of an instrumental change, UnitingCare reduced its fleets of over 1,500 vehicles from 6-cylinder to 4-cylinder models.

University of New South Wales: Sustainability Research

Scientia Professor Veena Sahajwalla, an Australian Research Council Laureate Fellow, introduced participants to the University of New South Wales’ Sustainable Materials Research and Technology (SMaRT@UNSW) research center. SMaRT@UNSW is creating ways to convert waste materials into high value functional materials and contributing to “social technologies:” solving two of humanity’s greatest problems at the same time.



Dr. Sahajwalla’s “waste-to-value” approach is illustrated in her world-first, commercialized “green steel” technology. Old rubber tires and plastics are used as a partial replacement for coke in electric arc furnace steelmaking. The work, commercialized by OneSteel, has saved over 2 million tires from landfill. Her work is also applicable to the creation of new materials out of e-waste, a problem that is predicted to increase five-fold worldwide over the next decade.

Wellcamp Airport

The Wagner Group (comprised of John Wagner and his brothers) is very clear about its sustainability goals for its Wellcamp Airport: it plans to be “the greenest airport in the world.” The Wagner Group recently opened its airport and business park in Toowoomba (outside of Brisbane) on 800 hectares owned by the family company. Of note, no normal concrete was used in the facility’s construction; rather, an estimated 26,000 cubic metres of earth-friendly concrete (EFC) was used, which reduced carbon emissions by 90%. Also, EFC is not only far superior in flexural strength, which is very important in airport pavement, but also produces low shrinkage and is totally resistant to alkaline reactivity and acid sulphate soils.



Other sustainable aspects of the terminal design include state-of-the-art measures for reducing energy consumption in the terminal, as well as tinted glazing and LED lighting. The quarry products used for the facility’s construction were obtained directly from the site, thereby minimizing the carbon footprint of transport for construction materials.

EFC has also been used throughout the business park, which includes commercial office space, hotels, retail, manufacturing, and industry (including the company’s own composite fibre technology business). Wellcamp Business Park also uses a rainwater harvesting and an onsite waste water treatment system, which will be reticulated throughout for amenities flushing and the irrigation of landscaping.

Rugby Farm

In its commitment to “Growing a Healthy Australia,” Rugby Farm has grown to become one of Australia’s largest growers of both corn and beans (it is the only supplier of innovative bagged green beans in Australia). With respect to sustainability, Rugby Farm has made an enormous effort to save water, and nowhere is this more evident than at their Bowen farm.



Rugby Farm trialed its “trickle tape” at their Bowen property—an area where all farms will be 100% drip irrigated in a few years—and its success there made it viable for Gatton. The effort Rugby Farm puts into maximizing its use of this limited resource is extensive. In fact, Rugby Farm employs a team whose sole job is to ensure the most efficient use of water possible so that “not one drop of water is wasted.” The challenge of getting more from less water has been an incubator for innovation. As the largest user of trickle tape (the thin, punctured hoses laid between crop rows that drip water), Rugby Farm has developed specialized machinery to pick it up between rows to save time and improve efficiency.

Oz Harvest

OzHarvest, founded in 2004 by Ronni Kahn, is the first perishable food rescue organization in Australia that collects quality excess food from more than 2,000 commercial outlets and delivers it—direct and free of charge—to more than 800 charities. To pursue its mission, OzHarvest collects surplus food from all types of food providers, including fruit and vegetable markets, supermarkets, hotels, wholesalers, farmers, stadiums, and corporate events.



FDIB participants took part in OzHarvest’s “Cooking for a Cause” on-site learning opportunity that allowed them to work with a professional chef in a commercial kitchen as they transformed quality surplus food into beautifully-cooked, restaurant quality meals that would be delivered directly to a number of charities that OzHarvest services. As part of this experience, OzHarvest team members discussed with FDIB participants the work OzHarvest does in the community, as well as the issue of food waste, food security, and homelessness in Australia.

Endeavour Foundation

An independent not-for-profit organization established in Queensland in 1951, Endeavour Foundation is Australia’s largest employer of people with a disability. Endeavour seeks to ensure that people with a disability can optimize their life experience and engagement, whether that means moving into a new home, gaining qualifications that help fulfill individual aspirations, or finding a job. Endeavour also operates training organizations and employment agencies that offer specialized transition-to-work programs, work placements, and apprenticeships for this population. The not-for-profit believes that employment services are a critical part of an inclusive, empowering community for people with a disability, especially in ways that improve both their confidence and self-esteem.

The Business Solutions arm of Endeavour Foundation supports people to find and retain integrated employment in the general workforce, and through the provision of related workplace training opportunities. People with a disability in Endeavour Foundation's Business Services are involved in the manufacture of timber furniture and other wood products, safety products, mailing, collating and packing services (including food and pharmaceutical packaging), document destruction, industrial cleaning cloths, e-recycling, and industrial sewing.

Michael Hill International

Michael Hill International enjoys a stellar reputation of serving its global customers with quality jewelry that is comprised of thoughtfully sourced materials from leading designers and diamond suppliers. The company is committed to ensuring that its certified diamonds are conflict-free; as a result, diamonds are only purchased from sources that the company knows and trusts. To support this commitment to legitimate, quality sourcing, Michael Hill purchases its diamonds and diamond jewelry in accordance with the Kimberly Process, which was enacted in 2003 to help combat the trade in conflict diamonds. FDIB participants learned about this sourcing process when they visited a Michael Hill retail facility in downtown Brisbane.

More specifically, this Kimberly Process ensures that rough diamonds are exported and imported with a government-validated Kimberly Process certificate stating the diamonds are conflict-free, are transported between signatory countries in a sealed and tamper-proof container, and are sold with a warranty from sellers that confirms the diamonds being sold are conflict-free.

Brisbane Convention Center

The Brisbane Convention Center's commitment to the environment is fundamental to its daily operations, and the Center is committed to minimizing its impact on the environment. Of note, the Center has obtained *EarthCheck Gold Certification* for its superior environmental practices and achievements; this global certification program acknowledges the Center's compliance to the highest environmental standards.



In touring the Convention Center in downtown Brisbane, FDIB participants were able to learn about particular practices that contributed to the Center's earning this distinction. For example, a retro fit of the Center's escalators to sensor mode results in a 30% reduction in escalator energy use. Also, an organic waste dehydrator to handle organic waste turns 100kg of waste into 10 kg of biomass. With respect to water use, recycled water is used to clean the facility's roof, and the process of blocking storm water drains and redirecting water to collection containers for reuse prevents pollution from entering the storm water system.

The Convention Center is also proud to participate in AEG's *1EARTH*, AEG's corporate environmental sustainability program, which tracks its environmental performance on a monthly basis, measuring energy consumption, water usage, and waste diversion.

Bee One Third

Bee One Third seeks to educate the public on the critical role that honeybees play in relationship to the global food supply, as one-third of this supply is pollinated by honeybees. Co-founder Jack Wilson Stone met with FDIB participants to discuss implications for this food supply, and also to share rooftop beehives at the organization's Brisbane location. Unfortunately, honeybees are facing a dire future caused by pesticides and urban sprawl. To help bring attention to their plight, Stone's organization offers education and outreach to help urban residents, in particular, learn about the important role that honeybees play in food production. Stone uses traditional methods to "re-home" wild colonies of bees into hives, and he helps interested individuals learn how they can use similar methods to cultivate their own hives.



IV. CULTURAL EXCURSIONS

Bondi Beach

Participants visited Sydney’s Bondi Beach, an Australian National Heritage List attraction that is not only one of Australia’s most famous beaches, but also recognized globally as a surfing mecca. “Bondi,” an Aboriginal term that means “noise of water breaking over rocks,” is also the home of the Bondi Surf Bathers’ Life Saving Club (more informally, the Bondi Surf Club), recognized as the oldest club of its kind internationally. Established in 1907 at Bondi Beach’s Royal Hotel by a group of like-minded bathers, the Surf Club is largely responsible for introducing surf lifesaving to Australian beach culture.



Taronga Zoo

Wallabies, kangaroos, koalas, emus, and Tasmanian devils . . . these were just a few of the native animals of Australia that participants had an opportunity to see during a visit to Sydney’s Taronga Zoo. “Taronga,” an Aboriginal word meaning “beautiful view,” aptly captures both the 21-hectare zoo grounds themselves, as well as the zoo’s location on elevated land along the shores of Sydney Harbor.



Divided into eight zoogeographic regions, Taronga Zoo is home to over 2,600 animals of 340 species and is also considered Australia's leading zoological garden, featuring the nation's finest collection of native animals and a diverse collection of exotic species.

Sydney Harbor Bridge Climb

Several adventurous souls successfully completed BridgeClimb™, a 3-hour guided journey to the summit of the Sydney Harbor Bridge; this experience was an optional event on the FDIB itinerary. After suiting up in official BridgeClimb™ gear and receiving a safety orientation, climbers began their ascent up the bridge by walking on a series of catwalks and ladders amidst the din of Sydney traffic. On their journey to the bridge summit, climbers received an in-depth guided narrative on the bridge's history and construction.

Opened in 1932, the Sydney Harbour Bridge itself is an Australian icon, a striking feature of Sydney's skyline that remains the largest steel-arch bridge. Locals affectionately refer to the bridge as "the coathanger."

Sydney Opera House & Harbor

Participants enjoyed a lunchtime cruise around Sydney Harbor, often regarded as one of the most beautiful natural harbors in the world. The harbor itself is surrounded by approximately 240 kilometers of shoreline, offering accessible walkways for residents and visitors alike. A short walk from the harbor is The Rocks, the historic birthplace of Sydney, and participants enjoyed a guided tour of this area as well.



Following this lunchtime cruise around Sydney Harbor, participants enjoyed a visit to the iconic Sydney Opera House, an innovative architectural work of the 20th century that brings together multiple strands of creativity and innovation in both architectural form and structural design. Opened in 1973 and designed by Danish architect Jorn Utzon, the Opera House comprises three groups of interlocking vaulted “shells,” which roof two main performance halls and a restaurant. The Opera House continues to have an enduring influence on structural engineering and building technology around the world, and was included in the National Heritage List in 2005 under the Environment Protection and Biodiversity Conservation Act 1999.