



Meridian Energy Construction Clients' Group Meeting 15 June 2007

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Overview

Setting the Scene Keeping New Zealand New Purpose Core Business

- Project Kumutoto
 - Strategy Conversion
 - WorkStyle Principles
 - Strategic Framework
 - Performance Specification

- Tenant Observations
- Key Messages

Keeping New Zealand New

- Meridian Energy has always had a commitment to being a sustainable ٠ **company**. To support this, we are committed to generating electricity from renewable resources only.
- At Meridian, we're up for the renewables challenge because we believe in New Zealand and we believe in New Zealanders. We're protecting the environment for future generations.
- Meridian's electricity generation is renewable past present and future. It's • the right thing to do commercially, environmentally and socially.
- New Zealanders already support renewable generation (EECA survey 2004).
 - We're keeping New Zealand new this means fresh clean and pristine – all the things we love about our country. It also means that we're innovative; developing new technologies, new ways of operating, and new products for customers. We're thinking ahead.
 - We're proud of our commitment to renewable generation. We're • going to be vocal about it and stand out from the crowd.





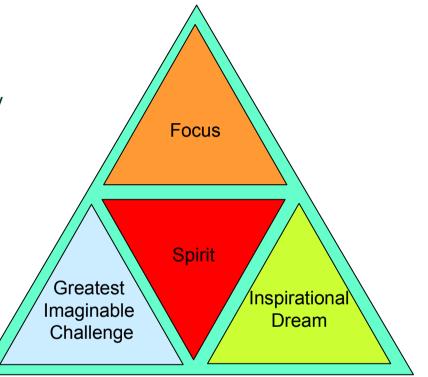






Meridian's Purpose

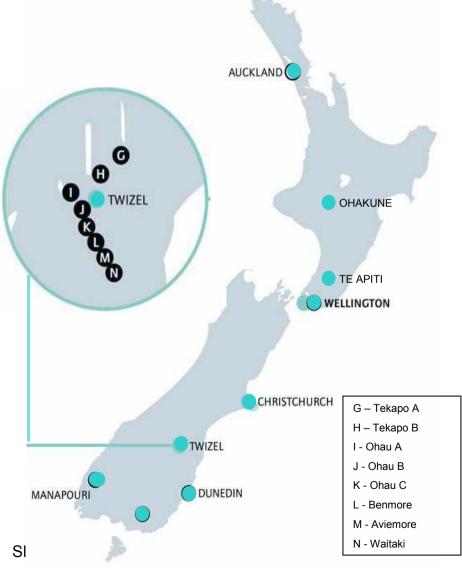
- Spirit Who we are
 - *Enterprising* Creative in working with Energy
- Focus How we will achieve our goals
 - Embrace the Meridian Way
 - building rapport,
 - being agile,
 - commercially driven,
 - forming hot-wired teams,
 - dreaming of innovative solutions,
 - acting on opportunities
- Inspirational Dream Why we come to work each day
 - Energising quality of life
- Greatest Imaginable Challenge (GIC) What tangible things will we achieve
 - The Global Reference Company in Renewable Energy







Meridian's Core Business



Wind

- Te Apiti (55 turbines)
- Wellington wind turbine
- Whitehill Southland (42 turbines)
- Project West Wind (66 turbines)

Hydro

- 8 hydro generation stations in the Waitaki chain
- NZ's largest hydro station in Manapouri

Co-generation

- Dunedin Energy Centre
- Winstone Pulp International (Ohakune)
- Auckland Hospital

Core Business

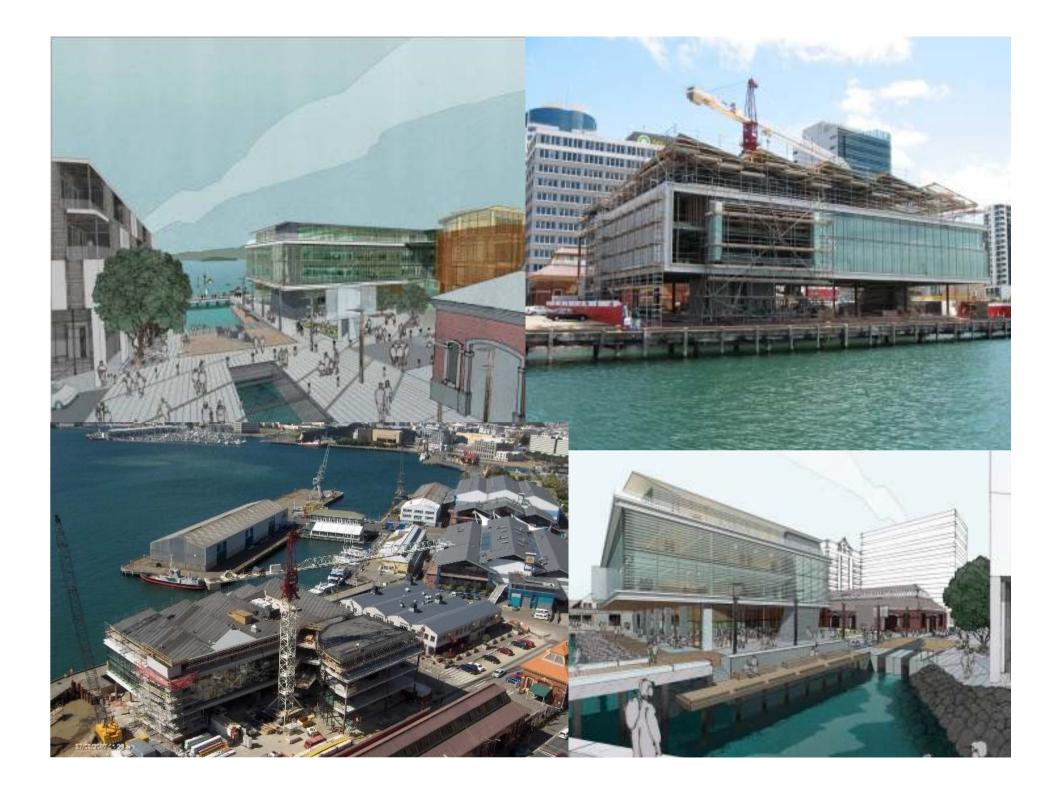
- Generation, trading and retailing of energy and wider complimentary products and solutions
- Core activities supported by functions for growing the business and delivering corporate and technology requirements
- 200,000 customers across NZ

Carbon Neutral

 Only NZ energy supplier with certified carbon neutral electricity – carboNZero certification by Landcare NZ











Project Kumutoto - Overview

- **Tight on Space** In 2004, current office space was projected to be insufficient by lease renewal dates so a project was initiated to solve this problem:
 - Across multiple sites
 - Observation of silo behaviour
 - Desire to 'bring everyone together'
- **'Walk the Talk'** Opportunity to align corporate statement using office accommodation as a demonstration of the brand values represented by Meridian
- **Getting Informed** Process of self education embarked upon before formally approaching the market for a solution wanted to be an educated client:
 - *Immature understanding misinformation and Green Wash*
 - Premium, Premium, Premium...Really?
 - Green Star Professional Accredited Project Manager (Australia being best available practice at the time)
 - Hosting visiting sustainability experts
 - Investigation of other local and international sustainable building initiatives
 - Engaging New Zealand's leading advisors





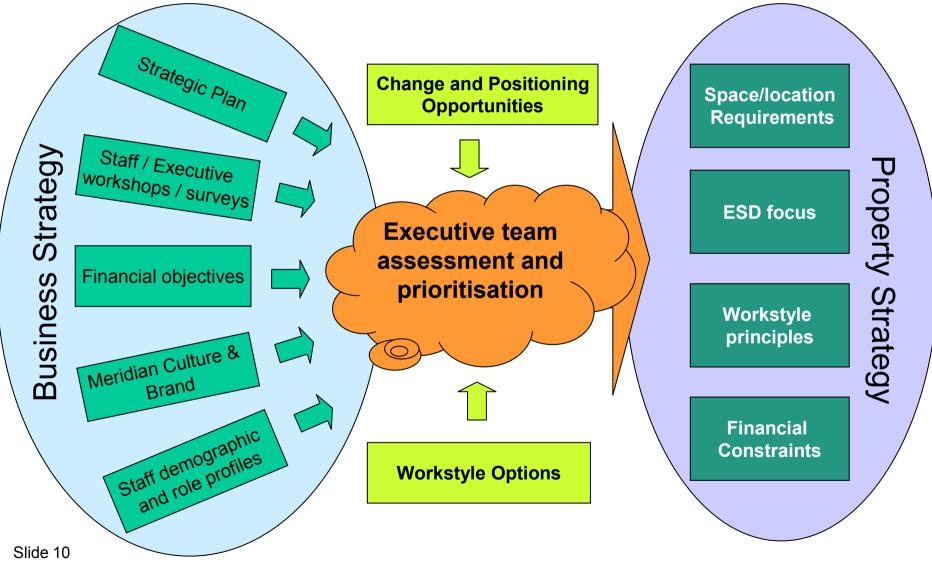
Project Kumutoto - Process

- Strategy Alignment Aligning Property Strategy with Business Strategy
- WorkStyle Principles Response to Business Strategies that impact on the working environment and current Organisation Challenges Influenced strategic brief and design
- **Going for Goal** Key Sustainability Goals were established:
 - Demonstrate the significance of the environment to Meridian in its pursuit of renewable electricity generation
 - Reflect Meridian's operational philosophy in its office accommodation
 - Point of Difference
 - Encapsulate Ecologically Sustainable Development (ESD) as one of the important aspects of the project
- **Strategic Framework** Sustainability Goals set within a structured strategic framework:
 - Balance sustainability with functional requirements and cost effectiveness 'getting the mix right'
- **Performance Specification** Setting the Bar
- **Procurement** Engaged market through Request for Proposal process Integrated _{Slide 9}Team used to support the evaluation (Meridian & Key Advisors)





Business Strategy to Property Strategy Conversion







WorkStyle Principles

Business Strategies that impact on Working Environments

Support future growth strategy

Achieve competitive advantage by doing more with people



Recruiting and retaining the best people



Align accommodation with branding strategy

Slide 11









Workstyle Principles

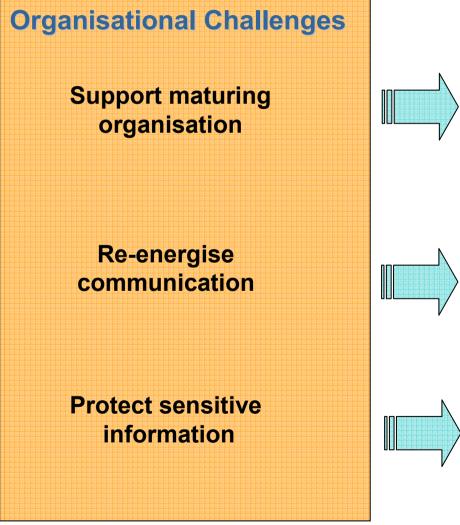
- Provide a flexible working environment to accommodate future changes in staff numbers
- Project space to allow project teams to get out of business as usual
- ✓ Productive work point
- ✓ More informal meeting rooms/collaboration spaces
- ✓ More quiet spaces to work and think
- Appropriate technology
- Provide a working environment with a point of difference
 Support staff work / life balance
- ✓ Appropriate facilities to encourage family participation
- Encourage communication with open, flexible working environment
- Create a family friendly working environment
- Places for staff to unwind
- Project image of renewable energy and energy efficiency
 Accommodation is a point of difference
 Remove clutter and mess







WorkStyle Principles



Workstyle Principles

- Develop knowledge management / research centre
- ✓ Centralise records management
- Support specialist staff with a range of facilities
- Support divided teams with technology
 Promote face-to-face communication
 Encourage ease of circulation
 Minimise the number of floors
- Zoning public / privileged /private areas
 Separation of sensitive areas
 Centralise records management





Strategic Framework

'To achieve the physical embodiment of Meridian Energy's GIC by providing a work space that sets the standard for ESD, cost effectiveness and user experience'

Vision	Cost effectiveness	User experience	ESD
Goals	Demonstrate the value of ESD in a commercial context	Create a healthy safe and exemplar office building as a point of difference	Leverage our building to align with our brand and Renewables Strategies
Objectives	Total occupation cost neutral or better compared to a conventional (non ESD) commercial office development over a 20 year period	Office environment that improves user satisfaction to at least +5% A "wowness" factor	Energy usage of 80kwh/m²/pa – 31kgCO ₂ /m²/pa Water usage of 0.16m3/m2/pa 4 ½ + Green Star
Defining Aspects	Cost Programme Commercial terms	Working Environment Indoor Environment Quality Aesthetics Amenities	Energy Efficiency Water Conservation Materials Management & Operations Star Rating





Performance Specification

- Holistic and Integrated View This is more than just an office
- Tenant Decision Specify 'What you Want' or 'Get What You're Given'
- Setting the Bar Clearly establishes what is the minimum acceptable standard is on the table, reflects tenant drivers (i.e. Energy Efficiency) and assists in understanding the quantum of premium against benchmarks which of course has the effect of setting a new benchmark
- **Tenant Lead** Is the Tenant the new King Maker?
- Assists Procurement Process Enables objective evaluation and comparison
- **Basis for Development Agreement** This is what the tenant is buying and Developer/Landlord is delivering commercial hook!
- Aligned with Green Star (or equivalent) Accepted as Best Practice and affords domestic and international credibility





Performance Specification

Defining Aspects - 21 Defining Aspects supported by 104 Performance Objectives with supporting Performance Requirements

✓Cost		✓Amenities	✓Buildir Areas	ng Commo	on √IT
✓Commercial Terms		✓Energy Efficiency	✓ Energy Efficiency ✓ Working Floors		✓Exterior
√Programme		✓Water Conservation	✓Lifts		✓ Structural
✓Working Environment		✓Materials	✓Services		✓Security
✓Indoor Environment Quality		lity ✓Management Operations	✓ Green Star		✓Electrical
Defining Aspect	Category	Performance Objective		Green Star	Performance Requirement
Cost	As per Development Agreement and Deed of Lease	Maintain cost equivalency or better wir conventional building on a total occup cost basis			Total occupation cost no more than \$xxx/m2/pa including naming rights, landlord operating costs and tenant energy consumption over office floor NLA
Energy Efficiency	Mixed (Natural and Mechanical) Mode HVAC System	ventilation when appropriate climatic conditions allow.	nditions allow. chanical heating, cooling and ventilation to		Internal air temperature range 21°C to 24°C For natural ventilation mode 19°C to 25°C based on NIWA 2.5% design conditions Mechanical ventilation system with heat recovery to offset otherwise increased energy requirements





Tenant Observations

- **Corporate Responsibility** Initiative can be seen as a demonstration of Corporate Responsibility that has required all market players to be pushed to varying degrees
 - Designers
 - Developers
 - Construction
 - An example of tenant led demand for sustainable buildings
- **Challenge the Market** The challenge to the market was to deliver a building solution that met the Meridian performance specification 100% without compromising one aspect over another
 - Cost effectiveness, User experience & ESD
- Align Property Strategy with Business Strategy
 - Know your Drivers What's important to you as an organisation
- Being an Educated Client
 - Get Good Advice
- Raising the Bar
 - Sustainable thinking is good business is more than just an office
 - Commissioning is critical





Key Messages



Corporate Social Responsibility – It Just Makes Sense

- \checkmark Economic
- ✓ Environmental
- ✓ Social

Sustainable thinking – its Good for Business

- Showcase how a commercial building can be both ecologically sustainable, highly energy and water efficient, and be very productive as a work environment.
- ✓ Wherever possible, building materials with recycled content or certified sustainability are being used and environmentally damaging materials are being minimised or eliminated.
- ✓ Can be demonstrated within a commercial context

Do your Work Up Front

- ✓ Holistic integrated view will deliver best result
- ✓ Do your homework
- ✓ Get good advice
- ✓ Know your drivers and objectives (What's your Strategic Framework?)
- More than just an Office?
 - ✓ Physical expression of your organisations brand and values through its working environment

Slide 17









Need More Information

- See the following websites:
 - New Zealand Green Building Council Case Study <u>http://www.nzgbcservices.org.nz/resources/NZGBC_Newsletter_July_2006.pdf</u>
 - ✓ Ministry for the Environment Case Study (Performance Specification) <u>http://www.mfe.govt.nz/publications/about/signals/issue8.html#meridian</u>
 - Manaaki Whenua Landcare Research Environmental Research Services <u>http://www.landcareresearch.co.nz/index.asp</u> <u>http://www.carbonzero.co.nz/</u>

✓ Meridian Energy Limited

http://www.meridianenergy.co.nz/aboutus/newwellingtonoffice/default.htm



