

Our Services

Introduction

Our consultants work directly with developers, architects, clients and other design, construction and business specialists to integrate resource efficient and environmentally responsive design into specific projects.

We assist clients develop buildings and communities that are more profitable to build (or renovate), less expensive to run, healthier, more comfortable and more productive to work in.

Our staff also compiles case studies and researches new policies, technologies and techniques for improving the performance of buildings and operations. Members of our team lecture widely, conduct seminars and author assorted publications.

Our consultants analyse such interconnected issues as site and building design, energy and water efficiency, resource-efficient construction, lighting and mechanical design, business and facility operations as well as building ecology.

A wide range of services is available to address the requirements of a particular project and yield an integrated, attractive, functional, and cost-effective design responsive to market, financial, approval and other project requirements.

These services include:

- Sustainable design analysis and solutions
- Design management
- 'Natural Capital' Management
- Project guidance and coordination
- Council, authority approval reports
- Plan reviews, on site reviews and Eco audits
- Sustainable construction methodologies
- Alternative power solutions
- Water management solutions
- Sustainable operations analysis and solutions
- Key note speaker services
- Educational Seminars, workshops
- Detailed ESD reports
- Accredited Building Thermal Modelling Assessors
- Local climate and geographic analysis modelling
- Accredited 'Green Star' professionals
- Section 'J' BCA design advice and assessments
- Innovative yet practical ESD practitioners

- Project management
- Micro Climate Analysis
- Environmental Guidelines
- Greenfield site sustainability analysis
- Eco audits
- AccuRate™ and BASIX Assessors
- Value Engineering
- Construction Inspections
- Cost analysis

Sustainable design analysis and solutions

Following a review of your project outlines and design philosophy, our team can assist you by proposing practical sustainable solutions.

To do this we use assorted software tools including local climate and geographical information modelling software in conjunction with our thermal building knowledge.

Design management

Integrated design is a prerequisite for a maximum sustainable return. The earlier sustainability is integrated into the design the greater the outcome. As experienced design managers we can assist and guide the design team to ensure they achieve the required outcomes.

In many cases we find the 'Charrette' method of intensive design workshops extremely beneficial. These intensive workshops enable design teams to use whole-systems thinking to explore the interconnections among such elements as restorative site development, innovative energy-saving design and engineering, creative functional design concepts, worker productivity enhancements, and environmental sensitivity in design and construction.

The workshops also have the benefit of providing a successful outcome in a relatively condensed period of time. They assist the design team to remain committed and focussed while promoting innovation.

'Natural Capital' Management

One of our major areas of expertise is the management of 'Natural Capital' which includes water, air quality, power, soil, human resources, timber, sunlight, nature and more.

The cost of these undervalued and irreplaceable resources is set to rise significantly as the capital economy realises their value and scarcity and they become priced accordingly.

Our approach to these resources encompasses the four pillars of 'Natural Capital' management. These include increased productivity, ecological redesign, a solutions-based business model and the concept of reinvesting in 'Natural Capital'.

We review your operations in the light of these requirements and provide cost effective solutions that apply to one or all of the interrelated 'Natural Capital' issues currently affecting your business, operations or structure.

Project guidance and coordination

Vim Consulting provides project guidance from the concept stage through to occupancy and operation. Our staff can coordinate the efforts of appropriate specialists on numerous issues including lighting, indoor air and environment quality, HVAC, energy modelling, power solutions, materials selection, advanced building envelope designs, water management, storm water reticulation, worker or occupant education processes and land ecology.

Our team of associates includes mechanical, electrical, hydraulic and storm water management engineers as well as architects skilled in sustainable design.

This team expertise enable us to either design your project for you or provide peer reviews or design performance parameters and specifications based on our years of sustainability experience and expertise.

Council and authority ESD reports

Many councils and authorities require sustainability or ESD reports for Development Applications, Construction Certificates or similar. These reports may have to encompass water and energy management as well as appropriate passive solar or thermal design criteria.

In addition the authority may specify the report to examine 'Natural Capital', resource management, environmental effects or risks and the mitigation of those risks. Many authorities now require low toxic internal environment diagnosis or an integrated recommendations report on an overall sustainable approach before any approvals are made or as part of the approval process.

Vim Consulting can assist in all those areas. We have a full understanding of how to work with councils and authorities to assist with your compliance requirements.

Vim Consulting also works with councils to help them understand what their sustainable requirements should be for any project. We often assist authorities in formulating a framework around proposed sustainable requirements in order to provide them with the appropriate tools to define their approval criteria and process.

Plan reviews, on site reviews and eco audits

Vim Consulting can review project plans and recommend potential resource and money saving opportunities. We carry out energy/water/internal environmental audits of existing premises or operations and introduce our clients to the benefits and practicalities of improving their current operational base with a sustainable approach.

These recommendations if undertaken will assist in achieving improved profit through reduced running costs and improved operational efficiencies, reduced waste, increased occupant or staff comfort and improved internal environmental quality.

Sustainable construction methodologies

Our team has broad experience in construction practice and we use this knowledge to recommend appropriate cost effective construction solutions that are profitable yet environmentally correct and fit into your overall sustainable intent.

We promote quality construction practice that will ensure improved internal environment quality and product longevity. We also offer the ability to be able to monitor your construction process for compliance with the specified sustainable design and operational criteria.

Alternative power solutions

The demand for on site power generation is rapidly increasing with solutions not just limited to solar generation or wind farms. *Vim Consulting* can review your site location and building design to recommend (and cost) alternative power options and design improvements.

Water management solutions

Water management is a major component of a sustainable approach. We provide cost effective solutions to water management through our hydraulic and civil engineers and overall experience in solving water management issues. We examine watershed and storm water management, water recycling and reuse as well as water consumption management.

Sustainable operations analysis and solutions

There is no point building a sustainable facility if it is not operated correctly. *Vim Consulting*, by working with your staff and using our experienced team of sustainable business and operations analysts, can review your overall business operations to ensure reduced energy costs, increased staff comfort and therefore productivity, improved operational procedures and significantly improved efficiencies and profitability.

Keynote speaker services

Our staff travels widely to educate members of all industries and genres on the benefits of sustainable development. We provide PowerPoint presentations on assorted relevant areas of sustainability including the cost effectiveness and benefits of sustainable practice.

We also present on ESD (Environmentally Sustainable Design) building concepts as well as passive ESD principles such as micro climate analysis, thermal building envelopes, daylighting initiatives and so on.

In addition, we present on climate change and its effects, and how you can improve your profit through using sustainable practice to reduce energy waste and therefore cost while improving occupant health and comfort.

We are able to tailor presentations to specific industries including education, hospitals, hotels, manufacturing and residential. All of our presentations highlight the win/win opportunity of sustainable building practices.

Educational seminars, workshops and articles

To meet individual client's or conference needs, we design educational seminars, workshops and write articles on topics of environmentally responsible development, design, operations and construction. Builder-training workshops can also be provided. Outside experts are brought in as needed to cover specific areas of interest.

Detailed ESD reports

Our team can provide in-depth Environmentally Sustainable Design (ESD) reports documenting the results of all our investigative project analyses with appropriate recommendations.

These reports, effective for greenfield sites, existing businesses and structures as well as plans and design concepts, may include local and micro climate analysis, design criteria, geographic interpretations of location, authority requirements, operational considerations, site constrictions, building thermal envelope considerations and more.

The reports relate all these to the design of your facility or the operations of your business. These then become a tool for change and understanding and can end up being a major component of your understanding of how your project or your business works.

Accredited Building Thermal Modelling Assessors

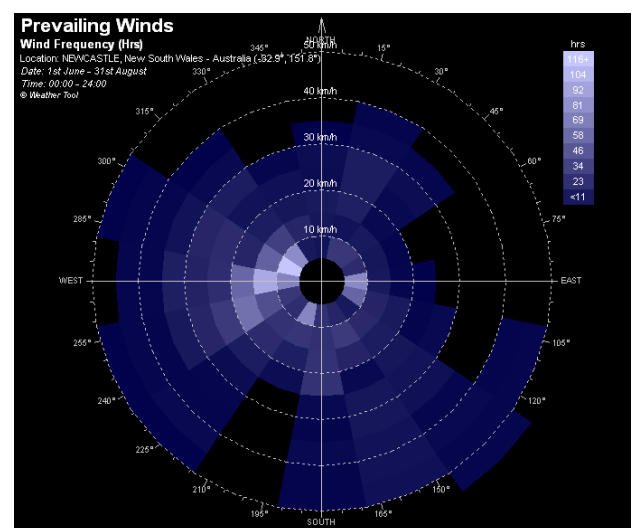
The Association of Building Sustainability Assessors (ABSA) is the only government accredited body for the teaching and examination of the use of Building Thermal Analysis Software. *Vim Consulting* is an accredited Building Thermal Modelling assessor. We are accredited in the use of the AccuRate™ Thermal Modelling Software.

Local climate and geographic analysis modelling

To ensure your building has considered the local climate in its design parameters or takes advantage of the benefits the location has to offer, local climate modelling and geographical analysis can be an important component of design facilitation.

Vim Consulting uses an assortment of leading software tools combined with our expertise in understanding sustainable design and operations to build up the bank of information needed to provide valid and effective sustainable design solutions for your design team.

The graph below identifies the different wind directions, velocity and temperatures in Newcastle during winter.



Accredited 'Green Star' professionals

The Green Star rating tool is a 'cutting edge' industry designed and supported process whereby verifiable sustainable design and operational outcomes are achieved by your building design and operations. It is an in depth and thorough benchmarking system that, if complied with, will ensure your project has a measurable 'cradle to the grave' sustainable basis.

In order to achieve the rating one must use an 'Accredited Professional' who is trained in the overall and specific Green Star concept, application and document compilation.

Vim Consulting has a Green Star 'Accredited Professional' on its staff and can offer the Green Star service to its clients.

If you require the leading industry outcome, Green Star may be the tool of choice. Please contact us to discuss the benefits and costs of committing to the Green Star path.

Section 'J' BCA design advice and assessments

The BCA (Building Code of Australia) Section 'J' is the newly enacted component of the BCA to ensure reductions in energy consumption. It is applicable to all buildings throughout Australia as of May 2006 with some minor state to state exemptions.

Vim Consulting can provide assessments for certification by a Registered Certifier under the prescribed BCA compliance methodologies. These assessments include mechanical, electrical, building envelope, lighting and glazing considerations etc.

Innovative yet practical ESD practitioners

One of the biggest concerns clients have is that sustainability is going to be cost ineffective. *Vim Consulting's* understanding of the design and construction process and our broad experience in practical sustainability ensures that our solutions and recommendations are practical, cost effective and relevant.

While being practical, it is also important that we are innovative towards sustainability issues. This is because innovation drives the future. It is also because every design and application is different. There is no generic solution. This openness to innovation promotes the creation of practical solutions that may have never been examined if the fear of innovation was allowed to surface.

Design and project management

Vim Consulting's team has experienced and qualified design and project managers who have worked on some of the worlds largest and most detailed projects. These skills enable us to ensure your project is appropriately managed from concept to completion.

This experience is of great benefit whether your projects is a small design analysis concept or the project management of a major design and construction facility or operational analysis procedure.

Environmental guidelines

Together with the client's design team, we draft environmental guidelines to guide large or small development projects from 'the cradle to the grave'.

We can also write sustainability handbooks to assist with staff and occupant education as well as provide training in the sustainable features that have been incorporated into the facility or business plan. Both of these will provide tangible frameworks through which to achieve environmental goals.

Micro climate analysis

Once you impose a building upon a landscape, you change the local environment around that structure. This is called the micro climate.

Vim Consulting uses micro climate analysis to recommend specific design changes or procedures to regulate or influence the local micro climate and use those changes to reduce energy demands, improve comfort, reduce building waste and more.

The analysis also assists in integrating the building with its surroundings. This improves the livability and attractiveness of the building for occupants. Micro climate analysis is a powerful tool in the armoury of sustainable design.

The graph below indicates the improved comfort percentages achieved for a specific type of building in Newcastle,NSW, through the application of thermal mass.

Greenfield/community site sustainability design analysis

The importance of committing to a sustainable outcome at the very beginning of your project cannot be underestimated. The earlier the decision is made to go 'green', the greater the cost and design benefits and outcomes.

Our team's strong belief in the benefits of a sustainable approach underpins our greenfield site analysis and recommendations. We review and analyse geography, water, sunlight, flora, local climate, design intent, fauna, authority requirements, proposed resident requirements, energy demands and supply alternatives, sewerage, innovative urban design concepts, transport, infrastructure, operational demands and more.

This information can help establish the parameters for the entire design. We make sure your project will suit its environment and will incorporate practical and innovative sustainable features to improve outcomes for all stakeholders including Planet Earth.

AccuRate™ and BASIX Assessments

The AccuRate™ tool is a second generation software tool that replaces the NATHERS rating tool for assessing the thermal capabilities and subsequent energy use of your residential buildings.

It is 'cutting edge' software designed and built by the C.S.I.R.O and incorporates a highly technical database and advanced software engine. It ensures a detailed review of your building design and provides the possibility of comparing different design options to your building to improve building energy use and thermal comfort.

It should be accredited by the Dept of Planning (NSW) for building thermal assessments (including BASIX compliance) by December 2006.

Vim Consulting is accredited in the use of the software. Coupled with our sustainability and thermal building design experience, the software enables us to review your design and make recommendations on how to improve your design for comfort, energy management and more.

Value engineering

Our expertise in sustainability coupled with our knowledge of the design and building process enables us to provide our clients with the opportunity to 'value engineer' their product. This ensures the design, construction and operations of any facility or business have been reviewed from an experienced objective viewpoint.

The value engineering process is a powerful tool for minimising poor design and building risks, reducing costs and construction time, and ensuring improved built environment outcomes.

Construction inspections

Most buildings have a design life of 40 years. A sustainable building should aim for a design life of 60 years and the monitoring of appropriate building practice as well as ensuring the correct ESD products and methodologies have been implemented will go a long way to increasing your building life span as well as minimising 'down time', repairs and maintenance bills.

Our extensive experience in design and construction enables us to ensure your design is specified correctly and that your building is erected correctly to provide the longevity required of a sustainable building.

Cost analysis

Vim Consulting are fully aware of the costs of implementing sustainable practice. It is important to be cost effective and ensure also that the client can see the value of any of their investments in sustainable outcomes. We can provide Capital Cost advice, Life Cycle Costing, Net Present Value, Return on Investment and other relevant costing analysis and diagnostic services.