

## Our Services

Consulting is a highly effective vehicle for assisting with change.

If we change our initial design and philosophical operational concepts, the design and construct of our facilities as well as our business operations will benefit.

Our clients are not only implementing and demonstrating the sustainable techniques we believe in and recommend, they are forcing their competitors to follow.

A growing number of companies engage our consulting team to show them how to increase profits and gain the competitive edge through more restorative practices, processes and products.

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.

Complementing these consulting activities our staff also compile case studies and research 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.

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

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. The team generates a range of available options that address the requirements of a particular project and yield an integrated, attractive, functional, and cost-effective design responsive to market, financial, approvals, and other project requirements. This allows practitioners to create and manage the built environment and operational criteria in ways that dramatically improve human and natural communities.

Our general services include the following:

- 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
- AccuRate and BASIX Assessors
- Value Engineering
- Construction Inspections
- Costings

### Sustainable design analysis and solutions

Team members review and critique your project outlines and design philosophy. From the results of these reviews, our team will propose practical sustainable solutions. We use assorted software tools including local climate and geographical information modelling software in conjunction with our thermal building knowledge to provide analysis of the proposed built environment. We then integrate the outcomes from this software with our expertise to provide your project with an array of recommended sustainable options and solutions

### Design management

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

Many architects and services designers have very little understanding of the detail or importance of sustainability. Some designers believe it can be achieved through changing the light globes, for example, or installing a rainwater tank.

This of course is not what sustainability is about.

The design process for a project with sustainability as one of its specified outcomes should be managed or guided by a sustainability consultant to ensure all avenues of sustainable design, build and operate are addressed and investigated. 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, as well as strategies to improve environmental sensitivity in design and construction. They 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 focused while promoting innovation. This procedure will also significantly reduce design time and design cost, while also expediting the construction process.

## 'Natural Capital' Management

One of our major areas of expertise is the management of 'Natural Capital'. This encapsulates the management of water, air quality, power, soil, human resources, timber, sunlight, nature etc. These are all currently undervalued irreplaceable 'Natural Capital' resources that form the basis of our existence. No business, no community, can survive without water, air, earth etc. Incidentally, they are also irreplaceable. We cannot manufacture water, or air, for example.

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 team is well versed in understanding the 4 pillars of Natural Capital management. This includes increased productivity, ecological redesign including Bio-Phillic concepts; the 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 conceptual stage through 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 who are skilled in sustainable design and are also passionate about its relevance and benefits.

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 expertise and wisdom.

## Council and authority ESD reports.

Many councils and authorities require sustainability or ESD reports for Development Applications, Construction Certificate or similar approvals before commencing any project. These reports may have to encompass water and energy management as well as appropriate passive solar or thermal design criteria. The authority may specify the report to examine 'Natural Capital', resource management, environmental effects or risks and the mitigation of those risks to the environment. 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* offers all those services. We have a full understanding of how to work with Councils and authorities to assist with your compliance requirements as well as often working with councils to assist them understand what their sustainable requirements should be for any project. We also assist authorities in formulating a framework around proposed sustainable requirements in order to provide those authorities with the appropriate tools to define their approval criteria and process.

## Plan reviews, on site reviews and Eco Audits

Team members review and critique project plans and recommend potential resource and money saving opportunities. We carry out energy /water/internal environmental audits of existing premises or operations and then introduce our clients to the benefits and practicalities of improving their current operational base with a sustainable approach.. We investigate and analyse all facets of your building and business operations (if required), and then make recommendations to provide the maximum benefit pertaining to your specified required outcomes. We then assist our clients with the management and implementation of that process to ensure their overall outcomes are achieved and the project is bought to a successful completion. These recommendations if undertaken will assist in achieving improved profit through reduced running costs and improved operational efficiencies, reduced waste, increased occupant or staff comfortability 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. There is no point in building a sustainable building if it falls apart in 3 years. That is not sustainable practice.

## Alternative power solutions

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

## Water management solutions

Water management is a major component of a sustainable approach and we provide cost effective solutions 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 in building a sustainable facility if it is not operated sustainably. In order to survive, it is becoming more important for all businesses to ensure they have a sustainable base through their operating philosophy and operational practice. *Vim Consulting*, by working with your staff and using our experienced team of sustainable business or operations analysts, are able to review your overall business operations to ensure reduced energy costs, increased staff comfortability 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/ genres on the benefits of sustainable development. We provide Power Point 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,

incorporating passive ESD principles including micro climate analysis, thermal building envelope, daylighting initiatives etc. In addition, we present on climate change and its effects, and how you can improve your profit through using sustainable practice which will reduce energy waste and therefore cost, while improving building occupant health and comfortability.

We are able to target specific industries such as Education facilities, Hospitals, Hotels, manufacturing residential etc. All of our presentations highlight the Win/Win Opportunity.

## Educational Seminars, Workshops, Articles

To meet individual clients' or conference needs, we design educational seminars or workshops or 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 provides in depth Environmentally Sustainable Design (ESD) reports which document the results of all our investigative project analyses with appropriate recommendations. These reports, effective for green field sites, existing businesses or structures, plans or design concepts, may include local climate analysis, micro climate effects and design criteria, geographic interpretations of location, authority requirements, operational considerations, site constrictions, building thermal envelope, etc, (in addition to numerous other relevant criteria) and relate all these to the design of your facility or the operations of your business. They may include operations analysis, philosophy review, results of workshops etc. These then become a tool for change, for understanding and then implementing the recommendations and solutions provided by the report and these tools can end up being a major component of your understanding of how your project or your business works. If the recommendations in our reports are followed, they will ensure measurably improved sustainable benefits in addition to creating more project control and understanding for the client or project team.

## Accredited Building Thermal Modelling Assessors

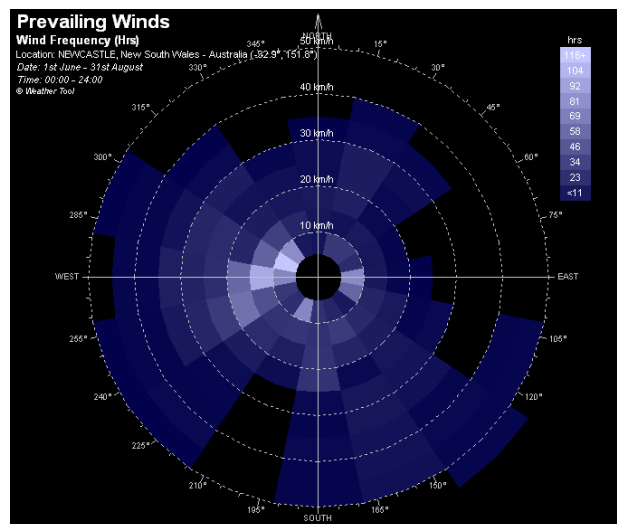
One of the major components of a sustainable structure is its envelope. If the building thermal envelope is considered in design then the sustainable benefits are far reaching. The use of the appropriate thermal modelling software will ensure your building achieves measurable thermal stability resulting in dramatically improved comfortability of the occupants and the resultant massive reduction in energy consumption

for lighting, heating and cooling. 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* are accredited Building Thermal Modelling assessors. We are accredited in the use of the 'AccuRate' Thermal Modelling Software.

## Local climate and geographic analysis modelling

In order to ensure your building design has considered the local climate in its design parameters or takes advantage of the benefits the location has to offer, the use of local climate modelling and geographical analysis software can be an important component of design facilitation. Imagine how uncomfortable it would be (and expensive) to live in Hobart in a house designed for the Cairns environment! Unfortunately this happens every day in Australia. Our homes, our facilities, our hospitals, our schools etc; actually most of our structures are inappropriately designed for the climate or location they are to be constructed in. *Vim Consulting* use 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 an innovative 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 their staff and offers that service to their 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. (There are some minor state to state exemptions).

There are assorted methodologies to ensure compliance with the Section 'J' requirements and *Vim Consulting* offer the service of providing assessments (but not certification) for certification by a Registered Certifier under those prescribed BCA compliance methodologies. These assessments include mechanical, electrical, building envelope, lighting and glazing etc.

## Innovative yet practical ESD practitioners

One of the biggest concerns clients have is that sustainability is going to be cost ineffective. They are also concerned it is hocus pocus, vague tree hugging gobbledy-gook! True sustainable practice is cost effective and is all based in fact and science. (Numerous studies have validated this)

Physics, Nature, thousands of years of practice by assorted civilizations all around the world. These are the backbone of sustainability. It is not about 'New Age' 'feel good' solutions. It is a practice that works. *Vim Consulting's* understanding of the design and construct process and our broad experience in practical sustainability ensures that our solutions and recommendations are practical, cost effective and relevant. At the same time, in order to be practical, we must be innovative as sustainability is not just about being simple; it is also about, in some cases, being innovative. 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 or 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 through to the project management of a major design and construct facility or operational analysis procedure.

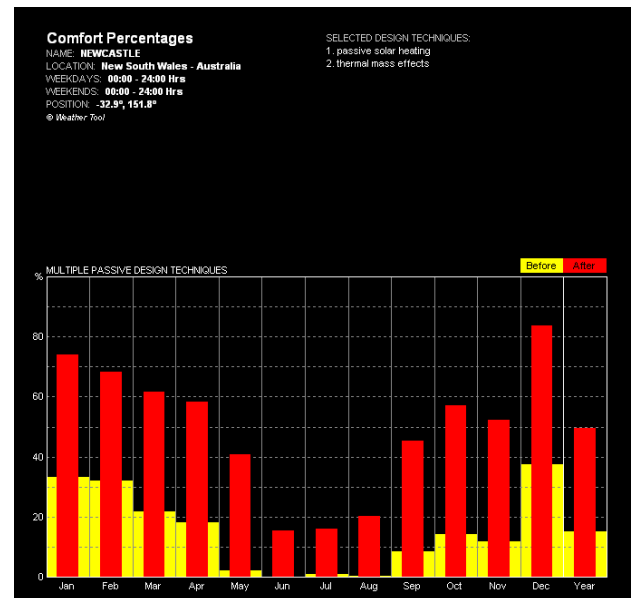
## Environmental Guidelines

Together with the client's design team, we draft environmental guidelines to guide large or small development projects from the 'cradle to the grave' design, build and operate process. We also write sustainable handbooks for your project to assist with staff and occupant education as well as 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. You are creating your own version of 'climate change'! This is called the Micro Climate. This new ability to create also gives you the power to manipulate that climate for your benefit. Vim Consulting use Micro Climate Analysis to recommend specific design changes or procedures to enable your building to regulate or influence the local micro climate and use those changes to reduce energy demands, improve comfortability, reduce building waste etc. It also assists in making the building a more integrated component 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, design benefits and outcomes. The design for a house or a major residential community must also be integrated from the start to maximize your sustainable results. The benefits of ensuring the initial basis for you design is analysed and incorporated into your design concepts are imperative for a successful project. 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 etc. This information provided by us creates the backbone of the design parameters which then becomes the basis on which your design team such as architects etc can work from. Through these recommendations, whether it is for a new home or new suburb, we make sure your project will suit its environment and will incorporate practical and cutting edge sustainable features that will improve the outcomes for all stakeholders including Planet Earth.

## AccuRate and BASIX Assessments

The AccuRate tool is the 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 'Second Generation' software designed and built by the C.S.I.R.O and incorporates a highly technical data base 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* are accredited in the use of this tool and this, coupled with our sustainability and thermal building design experience enables us to review your design and then with this analysis tool, make recommendations on how to improve your design for comfortability ,energy management etc.

## 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 will ensure the design, construct and operations of any facility or business have been reviewed from an experienced objective viewpoint. Consequently detail rationalisations as well cost saving initiatives and responses become incorporated into your project. The value engineering process is a powerful tool for minimising poor design and build risks, reducing costs as well as construction time while ensuring improved Built Environment outcomes

## Construction Inspections

An area of sustainable practice that is often not considered by other consultants or clients but is a major component of a sustainable approach is the practice of regular building inspections during the construction phase.

There is no benefit in constructing a sustainable building if it falls apart in three years or requires ongoing maintenance and repairs due to poor construction techniques or supervision. 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. 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, minimising your 'down time' as well as your repairs and maintenance bills. Our broad experience in the highest quality of developments helps us ensure your building has the same high quality structure and finishes This practice will also assist with ensuring the design and material features you paid for in your design and specification are correctly incorporated into the project.

This is an added benefit of using *Vim Consulting* –our practical experience in the Built Environment.

## Costings

*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.